

~~EXHIBIT NO.~~ 99-414

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LUNAR ORBIT RENDEZVOUS REFERENCE TRAJECTORY DATA PACKAGE (U)

PREPARED UNDER CONTRACT NO. 10001  
TO BELLCOMM, INC.

## RESULTS OF SIMULATIONS OF CSM AND LEM POWERED FLIGHT 3 SIGMA INPUT AND PARAMETER PER TURBATIONS

408-6085-RC000

April 30, 1965

Unclassified

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Classification changed to  
UNCLASSIFIED by authority of  
SCG-11, Rev. 1, 1/1/66, and  
SCG-6, 8/27/64, as amended  
Initials: MM Date: 3/28/69

See letter dated 3/11/29

1120 P. (1923)

from R. A. Wagner

SPACE TECHNOLOGY LAB

**THE AMERICAN BANK AND TRUST COMPANY**

THOMPSON RAMO WOOLDRIDGE INC.



**TRW SPACE TECHNOLOGY LABORATORIES**

THOMPSON RAMO WOOLDRIDGE INC

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Total Pages: 96

## LUNAR ORBIT RENDEZVOUS REFERENCE TRAJECTORY DATA PACKAGE (U)

Prepared under Contract No. 10001  
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RESULTS OF SIMULATIONS OF CSM AND LEM POWERED FLIGHT  
3 SIGMA INPUT AND PARAMETER PERTURBATIONS

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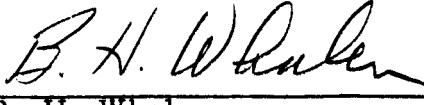
Approved:

  
 S. E. Benesch,  
Manager  
Space Navigation Department

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SCG-6, 8/27/64, as amended  
Initials:  Date: 3-22-69

*letter dated 3-11-69  
from R. L. Wagner*

Approved:

  
 B. H. Whalen  
Project Manager

Approved:

  
 E. M. Boughton,  
Associate Director  
Mission Analysis and  
Simulation Laboratory
~~DOWNGRADED AT 5 YEAR INTERVALS;~~~~DECLASSIFIED AFTER 12 YEARS.~~~~DOD DIR 5200.10~~

TRW SPACE TECHNOLOGY LABORATORIES

One Space Park  
**Unclassified** Redondo Beach, California

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### ABSTRACT

Sensitivity Matrices for the Apollo Error Analysis have been obtained and presented in TRW/STL Document 8408-6084-RC000 (Sensitivity Matrices For Apollo Error Analysis) dated 15 February 1965. The differences corresponding to the elements of the matrices presented in the above mentioned document are herein presented. These differences represent the differences in the estimated and actual terminal state vector and vehicle weight resulting from 3 Sigma variations in the vehicle performance, sensing parameters and from variations in the initial estimated and actual state. Initial position and velocity perturbations of  $\pm 10,500$  feet and  $\pm 10$  feet/second were used for CSM hyperbolic deboost and LEM Hohmann transfer while  $\pm 6000$  feet and  $\pm 15$  feet/second were used for CSM transearth injection. As was noted in the above mentioned document, the partial derivatives with respect to the accelerometer biases were generated using 1 Sigma values; nevertheless, they have been multiplied by 3 Sigma values in order that the differences be comparable with the remainder of the tables.

The format of the results presented here is the same as that of the above mentioned document with the exception that the columns are designated by numbers rather than symbols. They correspond with the numbers given in the key, Table 5.1, pages 44-46 in that document. The units are feet, feet/second and pounds.

Due to an error in the simulation of the LEM dynamics in the yaw axis there is an error in the above mentioned document in Column 32 (for the Hohmann transfer). The partial derivatives have been recomputed with the corrected dynamics for Trajectory Number 4. The corresponding deviations have magnitudes of about 3 feet, 0.003 feet/sec and 0.008 pounds. On the basis of the small magnitude of this effect and the similarity in this maneuver between the five trajectories, this one set of partial derivatives has been substituted for the erroneous sets for the other reference trajectories.

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TABLE I  
3 SIGMA DIFFERENCES FOR CSM  
HYPERBOLIC DEBOOST PHASE

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Table I - 1a. Trajectory No. 1 (Positive Perturbations)

1	10564.1545	4649.2077	-32.6900	3352.8753	852.2864	168.5229	6
2	-5626.1372	2367.6344	2470.8360	-5681.9683	145.8951	-82.6174	
3	929.8978	1872.4796	10155.7047	3033.5244	662.9053	2198.2761	
4	4.8339	-2.0630	-2.1032	4.8855	-1.1580	.0538	
5	-4.5638	-1.9761	-0.0262	-1.4411	-0.3343	-.0634	
6	-.0017	-.0370	-.0639	-.0530	-.0198	-.0251	
7	-68.7981	424.7734	-412.8520	-254.5367	-683.1771	27.6414	
8	-1267.5173	-6470.6257	237.4126	-4161.0707	-3171.6253	-919.3471	
9	322.0205	4063.4339	433.3463	2818.8547	1483.7509	-1439.5361	
10	-.7352	-2.7962	-2.1115	-5.2888	-4.3932	-.3256	
11	-4.1389	.7131	.6043	2.5097	-.7325	-2.1854	
12	.0085	-.6606	2.6328	-.6039	2.0633	-9.2601	
13	-20.3662	2.3256	-4.0261	14.2148	-48.5915	18.3181	
7			9	10	11	12	
1	THOMAS RAY WOODS INC.						
2							
3							
4							
5							
6							
7	10635.7607	4223.9635	379.9164	3607.1810	1535.7488	140.2953	
8	-4360.2452	8837.9585	2233.9237	-1519.8412	3317.6147	836.4052	
9	608.3278	-2190.5182	9720.8057	214.7030	-820.7214	3637.8186	
10	5.5796	.7290	.0081	10.1742	4.2350	.3798	
11	-.4306	-2.6944	-.6319	-3.9509	8.3973	2.1218	
12	-.0076	.6260	-2.7018	.5507	-2.0821	9.2344	
13							
1							
2							
3							
4							
5							
6							
7							
8	26.9372	-708.5956	66.0326	33.7322	-805.6266	370.8818	
9	28.4461	-1028.1850	284.3262	35.9610	-1175.2321	327.5158	
10	.5961	-1.5343	-7.1501	.7471	-1.8496	-8.6006	
11	.2804	-3.8161	.1837	.3641	-4.5935	.1836	
12	.3175	-5.7121	1.7028	.4150	-6.9122	2.0831	
13	.0010	-.0029	.0025	-.0015	-.0063	.0053	

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Table I - 1a. (Continued)

	19	20	21	22	23	24
1	-1.7459	2.5689	2.8651	-1.9658	-2706	.3248
2	6.1155	-6.3932	-8.2077	8.3308	.5202	-5249
3	-3.4954	3.4725	4.5477	-4.3399	-2321	.2963
4	-0.0054	.0056	.0071	-.0072	-.0004	.0005
5	.0006	-.0009	-.0011	-.0009	-.0001	-.0001
6	.0002	-.0002	-.0002	-.0002	-.0000	-.0000
7	-1.4912	-190.4965	2.0760	-43.1836	10.1386	1.8641
8	-3691	10.2215	.1327	-107.1769	-.3837	4.4234
9	1.4421	41.5358	-1.6780	-153.3615	-2.3532	6.5968
10	-.0009	-1.0777	.0029	-.2344	.0725	.0174
11	-.0632	.0906	.0566	-.6333	-.0058	.0483
12	.0484	.2084	-.0439	-.8176	-.0148	.0619
13	-.4526	.4570	.4082	-.4092	-.0366	.0400
	25	26	27	28	29	30
1	366.7740	13.9624	17.7693	53.2684	.3291	.2251
2	-1056.5954	-38.5277	-54.1531	-154.7744	-.5232	-.6121
3	591.6163	21.4280	28.4547	86.9048	.2814	.2904
4	.9191	.0338	.0473	.1348	.0005	.0006
5	-.1486	-.0051	-.0067	-.0211	-.0001	-.0001
6	-.0193	-.0011	-.0010	-.0031	-.0000	-.0000
7	288.3148	-1299.7544	293.1036	41.8528	-7.9492	2.3613
8	-11.3827	73.9032	733.1626	-.1.0851	.1673	5.6982
9	-200.1337	280.5408	1042.4294	-29.5646	1.9299	8.3232
10	4.980	-6.9690	1.5126	.0701	-.0794	.0159
11	5.2687	.5850	4.0778	.8209	.0067	.0436
12	-4.1232	1.3436	5.2612	-.6410	.0158	.0555
13	38.2241	2.6826	2.5098	5.9458	.0552	.0342
	31	32	33	34	35	36
1	-52.0564	-3.6638	.8254	-501.6646	1975.9158	.0099
2	11.3318	-31.6698	-3.5489	1470.6836	-5767.6176	-.0287
3	9.1449	-42.8965	1.9977	-825.0707	3233.4880	.0156
4	-.0098	.0272	.0765	-1.2314	4.9827	.0000
5	.0224	.0018	-.3065	.2011	-.8663	-.0000
6	-.0001	.0003	.0173	.0236	-.0756	-.0001
7	-52.1748	-4.2015	.8493	-.501.9365	1975.5358	4.5809
8	11.2706	-31.5324	-3.4654	1470.7882	-5767.1735	2.0187
9	9.1529	-43.0524	2.0139	-.825.0882	3233.4743	2.2182
10	-.0098	.0270	.0765	-1.2316	4.9829	.0450
11	.0223	.0020	-.3065	.2014	-.8657	.0255
12	-.0004	-.0001	.1773	.0233	-.0763	.0288
13	-.0884	.0474	-2.0991	148.9902	-.9.2648	.0024

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Table I - 1a. (Continued)

	37	38	39
1	2.0231	-30.1089	210.0686
2	-4.6146	89.3431	-653.5665
3	2.5260	-57.0931	370.7027
4	.0040	-.0622	.5747
5	-.0007	.0243	-.0819
6	-.0001	.0057	-.0171
7	1.2052	-58.2047	431.0179
8	-.0044	-50.7257	387.5054
9	-.9083	-76.4822	523.0482
10	-.0019	.0201	-.1534
11	.0259	-.0800	.5596
12	-.0206	-.0032	.0325
13	.1884	.1800	-209.5222

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Table I - 1b. Trajectory No. 1 (Negative Perturbations)

	1	2	3	4	5	6
1	-10561.6921	-4642.2977	-40.9860	-3342.1356	-840.0315	-161.0594
2	5625.7880	-2358.4954	-2480.7989	5682.7623	-141.3192	84.2698
3	-923.4253	-1877.1378	-10154.8915	-3019.2419	-661.4775	-2187.0688
4	-4.8339	1.9753	2.1372	-4.8768	.0835	-0.0867
5	4.5322	2.0194	-0.0200	1.4298	.3850	.0846
6	.0203	.0286	.0961	.0569	.0015	.0174
7	72.2941	-418.6997	418.0076	264.8404	696.2203	-21.0924
8	1269.9248	6480.4108	-244.7389	4162.3609	3176.9851	920.1536
9	-314.6704	-4067.4233	-431.0028	-2804.4161	-1482.1505	1450.8319
10	.7347	2.6984	2.1259	5.2960	4.3175	.2930
11	4.1195	-6715	-.6464	-2.5212	8.7818	2.2065
12	.0165	.6568	-2.5912	.6081	-2.0793	9.2522
13	20.2085	-1.9344	3.6691	-14.2079	49.1081	-18.1666
					11	12
1			9	10		
2			7	8		
3					17	18
4					16	
5						
6	-10636.8218	-4223.2798	-377.3522	-3607.1478	-1535.7409	-140.2223
7	4357.1144	-8838.2123	-2235.0137	1519.7660	-3317.6616	-836.4068
8	-603.7595	2190.2402	-9722.1053	-214.7166	820.6822	-3637.8353
9	-5.5807	-.7245	.0069	-10.1740	-4.2348	-.3791
10	.4132	2.6936	.6271	3.9501	-8.3975	-2.1219
11	.0051	-.6275	2.6939	-.5509	2.0820	-9.2348
12						
13						
			14	15		
1	.6773	.0487	-2.3334	.8456	-.2043	-3.6949
2	.2214	-1.8466	.3936	.2763	-2.6250	.5417
3	.2693	-1.9931	.5654	.3404	-3.2659	.8436
4	-.0002	.0016	-.0003	-.0002	.0022	-.0007
5	-.0001	.0001	.0010	-.0001	.0000	.0016
6	.0002	.0000	.0000	.0002	-.0002	.0001
7	-.79.9147	272.1549	1272.0872	-95.5997	310.5775	1449.3596
8	-26.8674	710.7199	-63.9962	-33.5767	.808.4372	-68.1704
9	-28.3301	1026.7296	-285.8349	-35.7846	1173.3513	-329.5063
10	-.5970	1.5338	7.1481	-.7487	1.8487	8.5975
11	-.2795	3.8285	-.1723	-.3634	4.6107	-.1669
12	-.3170	5.7038	-1.7113	-.4138	6.9005	-2.0955
13	.0010	.0078	-.0015	.0005	.0068	-.0044

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Table I - 1b. Trajectory No. 1 (Negative Perturbations)

	19	20	21	22	23	24
1	2.0482	-1.9075	-2.1013	2.9400	.4164	-.3022
2	-6.3063	6.1374	8.0736	-8.5011	-.5816	.5412
3	3.5609	-3.4905	-4.6206	4.1437	.3327	-.1734
4	.0055	-.0054	-.0070	.0073	.0005	-.0004
5	-.0006	.0006	.0009	-.0011	-.0000	.0002
6	-.0002	.0002	.0002	-.0002	-.0000	.0001
7	1.4854	190.4619	-2.1141	43.1533	-10.1487	-1.8554
8	-.4002	-10.1350	-1.1574	107.2651	.4131	-.4200
9	-1.4730	-41.5688	1.6298	153.3136	2.3373	-.6267
10	.0009	1.0777	-.0031	.2342	-.0726	-.0174
11	.0636	-.0899	-.0571	-.6336	.0062	-.0481
12	-.0494	-.2091	-.0435	.8167	.0141	-.0623
13	.4575	-.4536	-.4092	.4111	.0400	-.0376
	25	26	27	28	29	30
1	-366.4652	-13.8073	-17.6157	-52.7474	-.2294	-.2538
2	1059.4773	40.4303	56.0884	154.4896	.6105	.5676
3	-593.2965	-22.6576	-25.7301	-86.6884	-.2755	-.1401
4	-.8749	-.0354	-.0490	-.1346	-.0005	-.0005
5	.1516	.0052	.0068	.0208	.0001	.0001
6	.0126	.0011	.0010	.0032	-.0000	.0000
7	-288.5581	1299.0511	-293.9028	-41.8218	7.9348	-2.3484
8	14.4298	-71.7443	-730.9487	1.2048	-.1396	-.6932
9	198.2966	-281.8255	1043.7356	29.5052	-1.9309	-.3679
10	-.4527	6.9684	-1.5150	-.0700	.0794	-.0160
11	-5.2817	-.5843	-.0779	-.8213	-.0064	-.0435
12	4.1282	-1.3451	-5.2635	.6408	-.0163	-.0563
13	-38.3403	-2.7510	-2.5791	-.5.9473	-.0532	-.0322
	31	32	33	34	35	36
1	51.6051	3.2955	-.8594	503.8703	-2002.6499	-.0266
2	-5.8433	37.0983	3.4948	-1471.9571	5875.6949	.0221
3	-13.4925	38.6252	-2.0299	825.3672	-3296.9334	.0426
4	.0049	-.0319	-.0765	1.2913	-5.0347	-.0000
5	-.0220	-.0015	.3065	-.2421	.8707	.0001
6	-.0001	-.0003	-.1774	-.0064	.0552	-.0000
7	51.0670	3.1378	-.8637	503.4420	-2002.7740	-.5949
8	-5.6652	37.1625	3.4931	-1471.7211	5875.8493	-.9916
9	-13.4867	38.7668	-2.0150	825.3847	-3297.0251	-.2192
10	.0048	-.0320	-.0765	1.2913	-.0353	-.0451
11	-.0219	-.0012	.3065	-.2417	.8705	.0251
12	-.0003	-.0007	-.1773	-.0068	.0551	-.0294
13	-.0161	-.1494	2.0991	-149.3018	9.3057	.0010

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Table I - 1b. (Continued)

	37	38	39
1	-1.3083	18.4640	-210.1102
2	4.3223	-70.3403	654.6454
3	-2.4342	55.2770	-271.4780
4	-.0038	.0713	-.5280
5	.0005	.0161	.0834
6	.0001	.0433	.0108
7	-1.1923	58.1775	-432.0028
8	.0095	50.7540	-387.4170
9	.8637	76.4148	-523.9777
10	-.0019	.0201	.1334
11	-.0254	.0800	-.5169
12	.0195	.0032	-.0371
13	-.1830	-.1500	210.2421

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Table I - 2a. Trajectory No. 2 (Positive Perturbations)

	1	2	3	4	5	6
1	10444.7240	3695.7670	-27.9585	2657.4512	476.7426	98.1671
2	-5294.9285	2652.8948	2311.1945	-5558.6223	827.5390	-88.4341
3	715.4502	1660.1703	10182.1069	2783.6444	225.9938	2137.9886
4	4.5461	-2.2160	-1.9861	4.7821	-6734	.0968
5	-4.4971	-1.6113	.0022	-1.1422	-.2278	-.0527
6	-.0082	-.0083	-.0579	-.0371	.0140	-.0106
7	-176.9412	-484.4155	-362.6476	-857.1127	-1002.9599	-21.7984
8	-984.9465	-6265.0461	257.1437	-4093.3250	-2428.0950	-836.2056
9	155.9808	3671.0698	401.2795	2591.0269	958.7673	-1421.8314
10	-.9562	-2.9269	-1.9929	-5.3666	-4.8542	-.2370
11	-4.0797	1.0578	.5726	2.7700	-.7076	-2.0053
12	-.0000	-.5752	2.6170	-.5450	1.9267	-.9.3075
13	-21.1701	1.8064	-4.9980	12.1411	-52.0498	17.4349
	7	8	9	10	11	12
1						
2						
3						
4						
5						
6						
7	10624.8503	4179.1084	335.0407	3514.6940	1479.2664	120.2523
8	-4311.3289	8916.8628	2053.4424	-1464.7814	3255.3624	747.8009
9	559.8912	-2010.5826	9779.1973	192.5464	-732.7685	3559.8405
10	5.5141	.7073	.0084	10.1492	4.1807	.3339
11	-.4232	-2.6735	-.5717	-3.9124	8.4792	1.9519
12	-.0055	.5677	-2.6804	.5080	-1.9125	9.2968
13						
	13	14	15	16	17	18
1	-.1321	.5160	5.5207	-.2930	.6161	6.5984
2	-.3400	3.0338	-1.3035	-.4821	3.7537	-.1.6077
3	-.5363	4.0798	-.5666	-.7231	5.2605	-.7954
4	-.0003	-.0025	.0012	.0004	-.0032	.0015
5	-.0001	-.0003	-.0023	.0001	-.0002	-.0028
6	-.0002	-.0000	-.0001	-.0002	.0001	-.0001
7	70.0876	-215.6168	-1200.9613	83.3958	-244.9259	-1365.5424
8	29.8020	-603.2532	154.3462	36.8236	684.1144	170.5625
9	54.0260	-1008.0556	160.2060	66.1837	-1148.5914	185.6803
10	.5401	-1.2474	-7.0343	.6734	-1.4959	-.8.4408
11	.3065	-3.3787	.6624	.3947	-.0529	.7537
12	.5263	-5.8003	1.0698	.6740	-6.9915	1.3162
13	-.0005	-.0118	.0044	.0005	-.0126	.0073

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Table I - 2a. (Continued)

	19	20	21	22	23	24	
1	-1.7255	2.4015	1.4297	-1.1799	-1.1381	.1578	
2	8.8729	-9.0964	-7.0653	7.6164	.6169	-.6175	
3	-4.8087	4.6755	3.7797	-3.2117	-3.3058	.3151	
4	-.0078	.0079	.0061	-.0066	-.0005	.0006	
5	-.0006	-.0006	-.0002	-.0003	-.0001	-.0001	
6	-.0003	-.0003	-.0001	-.0001	-.0001	-.0000	
7	-2.6916	-178.4311	2.2836	-34.7899	6.6453	2.1455	
8	-.1483	23.3565	-.0611	-91.0373	-.9336	5.4196	
9	1.5610	22.7491	-1.0903	-150.9072	-1.1776	9.3130	
10	-.0171	-1.0439	.0118	-.2002	.0617	.0200	
11	-.0850	1848	-.0498	-.5609	-.0111	.0573	
12	-.0599	-.1023	-.0346	-.8396	-.0060	.0855	
13	-.6016	.6040	.3530	-.3589	-.0454	.0449	
	25	26	27	28	29	30	
1	237.6847	16.3351	9.2699	33.9270	.4434	.0993	
2	-1049.3136	-57.7705	-49.2618	-152.8253	-1.0187	-.4181	
3	551.7996	29.5158	20.7722	80.4113	.4784	.1879	
4	.8619	.0503	.0428	.1326	.0009	.0004	
5	-.0925	-.0055	-.0030	-.0123	-.0001	.0002	
6	-.0127	-.0014	-.0008	-.0027	-.0000	.0000	
7	347.6657	-1222.9843	237.8297	50.4368	-10.6794	1.6600	
8	-37.4963	164.4270	625.8605	-.5.0146	1.0110	.2792	
9	-149.3717	152.8917	1030.8152	-21.9304	1.6143	.7.2445	
10	1.4627	-6.7960	1.3009	.2254	-.1033	.0119	
11	5.3529	1.1975	3.6351	.8280	.0183	.0336	
12	-3.7863	.6636	5.4436	-.5845	.0106	.0506	
13	38.4854	3.6270	2.2075	5.9331	.0874	.0234	
	31	32	33	34	35	36	
1	-102.7253	-6.6274	.3428	-323.0184	1269.1817	-.0405	
2	31.1758	-57.1532	-2.6794	1453.1248	-5693.0530	-.0458	
3	8.5147	-86.2380	1.4942	-764.7468	2995.4335	-.0337	
4	-.0268	.0492	.0407	-1.2718	4.8747	.0000	
5	.0441	.0031	-.3138	-.1622	-.5302	-.0000	
6	.0000	.0004	-.1689	-.0009	-.0694	-.0000	
7	-102.6287	-6.4860	.3530	-322.5002	1269.3279	3.8569	
8	31.2811	-57.2541	-2.6709	1453.0656	-5693.0641	2.0529	
9	8.5239	-86.3553	1.4492	-764.7871	2995.4189	3.5334	
10	-.0268	.0493	.0407	-1.2716	4.8745	.0394	
11	*.0441	.0032	-.3138	-.1625	-.5301	.0263	
12	*.0001	.0005	-.1689	-.0010	-.0696	.0439	
13	-.2109	.1260	-.2.0991	149.5732	-.4286	.0005	

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Table I - 2a. (Continued)

	37	38	39
1	1.0732	-15.4080	125.0447
2	-4.3802	.89.0684	-627.5723
3	2.3230	-52.6399	332.9268
4	.0038	-.0770	.5002
5	-.0003	.0060	-.0434
6	-.0000	.0011	-.0110
7	1.4777	-63.5324	441.2201
8	-.1204	-.25.7301	209.3440
9	-.6458	-.80.1398	530.7442
10	.0067	.00256	-.1599
11	.0256	-.0712	.4623
12	-.0179	-.0178	.1131
13	.1830	.0937	-205.1527

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Table I - 2b. Trajectory No. 2 (Negative Perturbations)

1	-10444.2689	-3683.1506	33.0285	-2645.5576	-460.8553	-91.5981
2	5299.1668	-2658.7811	-231C.8840	5558.6727	-834.9220	89.8861
3	-712.5558	-1657.1699	-1C186.9227	-2768.2649	-220.3210	-2133.9497
4	-4.5468	2.3222	1.9748	-4.7807	.7516	.0625
5	4.4559	1.0750	.0067	1.1368	.1746	.0264
6	.0269	.0306	.0622	.0392	.0152	.0251
7	176.7621	495.3336	364.9516	868.7116	1017.7657	28.2556
8	992.4618	6259.0816	-256.1206	4093.7611	2419.3593	837.3787
9	-151.9791	-3667.9560	-405.1677	-2575.6559	-953.0016	1426.C477
10	• 9478	3.0242	1.9658	5.3668	4.9325	.2710
11	4.0510	-1.0963	-.5616	-2.7755	8.6535	1.9779
12	.0264	.5983	-2.6066	.5476	-1.8974	9.3229
13	20.9501	-2.0715	5.0362	-12.1025	51.7722	-17.6479
1				1.0	11	12
2						
3						
4						
5						
6						
7	-10624.2760	-4178.6275	-332.1143	-3514.6311	-1479.3308	-126.1949
8	4307.9838	-8916.8440	-2054.2281	1464.7389	-3255.3911	-747.8214
9	-560.7631	2010.4973	-578C.0153	-192.5606	732.7638	-3559.8621
10	-.5.5060	-.7036	.0085	-10.1486	-4.1807	-.3332
11	• 4056	2.6743	.5688	3.9118	-8.4791	-1.9520
12	.0007	-.5683	2.6751	-.5082	1.9125	-9.2971
13						
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
1	13	• 4252	-.1692	-5.9881	.5579	-.3919
2	2860	-3.1052	1.4634	3.952	-3.8252	1.7017
3	• 5414	-4.1761	• 6292	.6573	-.5.3237	.7967
4	-.0002	.0027	-.0013	-.0003	.0032	-.0016
5	-.0002	.0003	.0027	-.0001	.0003	.0031
6	.0002	-.0000	.0000	-.0002	-.0001	.0001
7	-70.1799	215.8252	12C1.0631	-83.5350	245.2506	1365.6779
8	-29.7435	605.3185	-152.3425	-36.6708	686.7828	-167.8770
9	-53.9299	1006.8298	-161.51C1	-66.0202	1146.9751	-187.3484
10	-.5412	1.2489	7.0343	-.6754	1.4981	8.4405
11	-.3059	3.3902	-.6508	-.3936	4.0701	-.7366
12	-.5253	5.7940	-1.0769	-.6724	6.9816	-.3266
13	-.0010	.0093	-.0044	-.0020	.0117	-.0078

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Table I - 2b. (Continued)

	19	20	21	22	23	24	
1	1.5929	-2.4478	-1.3460	1.3846	1.2741		.1034
2	-8.8542	9.0839	7.1088	-7.5627	-6328		.6583
3	4.7659	-4.7372	-3.8828	3.1542	.3336		-.2413
4	.0077	-.0079	-.0062	.0066	.0006		-.0005
5	-.0004	.0008	.0004	-.0004	-.0001		.0000
6	-.0003	.0002	.0001	-.0001	-.0001		.0000
7	2.7446	178.4563	-2.2339	34.8334	-8.4453		-2.1455
8	1.664	-23.2460	1.1370	150.8847	1.1776		-.54196
9	-1.5293	-22.7388	1.0441	-.0117	.002		-.3130
10	.0172	1.0441	-.0117	1.0117	-.0616		-.0199
11	.0850	-.1842	-.0500	.5608	.0108		-.0574
12	-.0593	-.1022	-.0354	.8398	.0062		-.0852
13	.5996	-.6030	-.3564	.3560	.0430		-.0459
	25	26	27	28	29	30	
1	-239.1953	-16.6514	-1C.2635	-34.6316	-.1646		-.0428
2	1052.7338	59.8817	51.5059	153.1280	.9925		.4390
3	-553.5490	-30.6225	-21.8608	80.5139	-.4527		-.1712
4	-.9143	-.0521	-.0448	-.1328	-.0008		-.0004
5	.0852	.0058	.0035	.0125	.0001		.0000
6	.0189	.0014	.0008	.0028	.0001		.0000
7	-348.5812	1222.5239	-238.2419	-50.3701	10.7508		-1.6682
8	40.7023	-162.2681	-623.6489	5.1721	-1.0162		-4.2475
9	147.7495	-154.0384	-1C31.9572	21.9753	-1.6153		-7.2567
10	-1.5169	6.7962	-1.3028	-.2254	.1034		-.0119
11	-5.3775	-1.1973	-3.6350	.9280	-.0186		-.0338
12	3.8059	-.6636	-.5.4442	.5856	-.0103		-.0502
13	-38.6113	-3.7007	-2.2822	-.5.9360	-.0903		-.0254
	31	32	33	34	35	36	
1	101.8748	5.3601	-.4890	322.4580	-1284.5009		-.0437
2	-22.0014	66.4575	2.6868	-1452.8696	5805.1915		.0762
3	-14.5506	90.2787	-1.4770	764.6842	-3056.3493		.0521
4	.0189	-.0571	-.0407	1.2178	.5.0283		-.0000
5	-.0437	-.0024	.3137	-.1221	.5622		.0000
6	.0001	-.0002	-.1689	-.0214	.0399		.0000
7	102.1156	5.9810	-.3081	322.7987	-1284.3756		-3.8131
8	-22.0717	66.4317	2.7208	-1452.8318	5805.2169		-2.0043
9	-14.5745	80.3169	-1.4296	764.6546	-3056.3390		-.3.5143
10	.0191	-.0568	-.0407	1.2181	-.5.0296		-.0394
11	-.0437	-.0022	.3138	-.1217	.5617		-.0263
12	.0061	-.0001	-.1689	-.0214	.0400		-.0436
13	.0352	-.2003	2.0991	-.149.2734	4.6395		-.0014

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Table I - 2b. (Continued)

	37	38	39
1	-1.1525	14.7581	-126.1018
2	4.4169	-89.6846	628.5869
3	-2.3340	52.7985	-333.4317
4	-.0038	.0775	-.5502
5	.0005	-.0056	.0359
6	.0000	-.0011	.0175
7	-1.4330	63.4880	-441.8216
8	.1700	25.7772	-209.9030
9	.6653	80.1636	-531.6388
10	-.0066	21.0262	.1855
11	-.0252	.0714	-.5063
12	.0182	.0180	-.1157
13	-.1815	-.0923	205.8444

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Table I - 3a. Trajectory 3 (Positive Perturbations)

	1	2	3	4	5	6
1	10420.0416	2617.9586	2.2572	1911.0512	192.2696	-4.4966
2	-4417.3169	3097.6917	-242.7310	-5520.1424	1339.1794	21.4341
3	-48.3689	-174.6546	10487.3063	-293.4603	15.3185	1653.3990
4	3.7624	-2.6944	.1838	4.7468	-1.1935	.0036
5	-4.4466	-1.1118	-.0060	-.8083	-.0522	.0025
6	.0029	.0040	-.0932	.0043	.0018	-.0147
7	-202.3725	-1055.2213	32.3217	-1217.2257	-948.5895	5.3644
8	-638.8641	-6346.1996	-28.8316	-4383.4040	-1663.9161	89.5284
9	.9104	-385.1295	383.3152	-278.5569	-51.7232	-1554.3801
10	-1.1449	-3.2319	.1785	-.3840	-4.8289	.0338
11	-4.1252	1.3277	-.0564	2.6590	-9.0410	.0261
12	.0042	.0570	2.3404	.0493	-.1986	-9.6281
13	-26.3089	1.9565	.6381	10.2807	-59.8851	-2.3332
	7	8	9	10	11	12
1						
2						
3						
4						
5						
6						
7	10625.4005	3673.1022	-29.6129	3128.2503	1141.2657	-9.5935
8	-3779.8278	9443.0330	-213.9724	-1137.2577	3003.7695	-67.8648
9	-49.2435	210.3832	10102.4050	-14.8785	66.9082	3207.7802
10	4.9181	.5386	.0059	10.1317	3.6349	-.0299
11	-.32223	-2.4440	.0506	-3.4670	8.9885	-.2033
12	-.0008	-.0531	-2.4396	-.0450	.2004	9.6134
13						
	13	14	15	16	17	18
1	-.0117	-.0662	3.2091	.0227	-.0648	4.1519
2	.0238	-.1946	-.9254	.0494	-.2652	-1.1642
3	-.7027	3.2334	.0549	-.8879	4.2452	.1089
4	-.0000	.0001	.0007	-.0000	.0002	.0011
5	-.0000	-.0000	-.0014	-.0000	-.0000	-.0019
6	-.0002	-.0001	.0000	-.0003	.0001	.0000
7	-5.3549	16.0556	-920.0047	-.6.2423	17.9780	-1028.6552
8	-3.6467	54.7589	121.5495	-4.3553	61.1916	131.3699
9	70.8590	-907.3335	-8.8249	83.8565	-1014.3701	-10.1750
10	-.0451	.1026	-6.0029	-.0549	.1203	-7.0332
11	-.0379	.3422	.5369	-.0468	.4018	.5893
12	.6981	-5.7667	-.0722	.8604	-6.7652	-.0873
13	-.0005		.0039	-.0005		.0092

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Table I - 3a. (Continued)

	19	20	21	22	23	24	
1	-1.0145	1.1230	-.0946	.0537	-.0821	-.1125	
2	9.4979	-9.7415	.4299	-.7013	-.1083	.0288	
3	.6195	-.5618	.0804	.5091	.0571	-.0558	
4	-.0084	.0085	-.0005	.0006	.0000	-.0001	
5	-.0001	-.0001	-.0000	-.0001	.0000	.0000	
6	-.0000	.0001	-.0000	-.0000	-.0000	-.0000	
7	-3.2615	-1.35.6265	-.2139	2.5885	-.6137	-.2114	
8	-.9095	19.1655	-.0200	8.1901	.0805	-.6098	
9	-.1783	-1.1684	.0008	-136.9036	.0011	10.7115	
10	-.0306	-.8753	-.0015	.0169	-.0047	-.0020	
11	-.1029	-.1831	-.0045	.0557	-.009	-.0065	
12	-.0070	-.0039	-.0003	-.8698	-.0006	.1054	
13	-.6455	.6450	-.0278	.0298	.0034	-.0029	
	25	26	27	28	29	30	
1	117.0076	9.1130	-.4104	16.0126	-.2907		
2	-905.3071	-63.7906	4.8072	-129.7777	-1.1707		
3	-50.4975	-3.4989	-2.5841	-7.2240	-.0187		
4	-.7868	.0557	-.0043	-.1130	.0011	.0000	
5	-.0352	-.0018	.0000	-.0043	-.0001	-.0001	
6	.0015	.0002	.0002	.0002	-.0000	-.0000	
7	316.3553	-943.1450	-18.1222	45.1740	-10.4836	-.0343	
8	27.7243	136.9858	-.55.8581	4.4239	1.0723	.0501	
9	12.5901	-7.8858	951.3246	1.8425	-.1185	-.5873	
10	2.0166	-.5.8407	-.1129	-.2977	-.1039	.0000	
11	5.6183	1.2203	-.3650	.8453	.0220	.0002	
12	-.3839	-.0263	5.7968	.0577	-.0005	-.0047	
13	35.8789	4.0674	-.2271	5.3862	.1079	-.0005	
	31	32	33	34	35	36	
1	-64.5366	.5958	.0148	-151.9132	597.5516	-.0308	
2	22.2520	8.3161	-.3.9049	1212.3365	-4747.2471	-.0056	
3	.0512	-64.6709	-.1060	67.7291	-264.8448	-.0045	
4	-.0193	-.0073	.0128	-.1.6623	4.0419	-.0001	
5	.0276	-.0003	-.3393	.0945	-.2358	-.0000	
6	.0000	.0006	-.0192	.0008	-.0020	-.0000	
7	-64.2711	.6148	.1029	-.151.8118	598.1240	-.2497	
8	22.3369	8.4360	-.3.8606	1212.3853	-4747.2923	-.1801	
9	-.0901	-.64.8397	-.1905	67.6724	-264.8960	3.7360	
10	-.0192	-.0073	.0127	-.1.0622	4.0457	-.0028	
11	.6276	-.0004	-.3392	.0945	-.2345	-.0027	
12	.0000	.0006	-.0192	.0008	.0054	.0476	
13	-.2085	-.0977	-.2.0991	156.7368	-.5244	-.0005	

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Table I - 3a. (Continued)

37	38	39
1 .1389	-5.4647	46.8112
2 -3.6889	88.3593	-446.7291
3 -.1635	5.4836	-25.0017
4 .0032	.0333	.3917
5 -.0001	.0363	-.0076
6 .0000	-.0586	.0011
7 1.2914	7.5805	-367.3159
8 .1729	14.8331	-200.8227
9 .0505	3.6255	164.4918
10 .0087	-.0298	.1488
11 .0255	.0711	-.3618
12 .0017	-.0040	.0223
13 .1621	.0205	-182.9548

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Table I - 3b. Trajectory No. 3 (Negative Perturbations)

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Table I - 3b. (Continued)

	19	20	21	22	23	24	
1	.7548	-1.5204	.0692	-.0538	-.0724	-.0746	
2	-9.6467	9.5644	-6674	.5209	.0425	-.0397	
3	-.5056	.6763	.0056	-.4795	.0278	.1124	
4	.0084	-.0086	.0005	-.0005	-.0001	.0000	
5	-.0000	.0004	-.0001	-.0001	.0001	-.0001	
6	-.0000	.0000	-.0000	-.0000	.0000	.0000	
7	3.1806	135.5541	.1511	-.2.6678	.5509	.1439	
8	8	9.326	-19.1230	.0327	-.8.1306	-.0678	.6375
9	9	1783	1.1962	.0272	136.9032	.0269	-10.6836
10	10	.0316	.8753	.0015	-.0169	.0047	.0018
11	11	1027	-1.828	.0047	-.0555	-.0009	.0065
12	12	.0070	.0040	.0003	8698	.0000	-.1054
13	13	.6440	-.6445	.0293	-.0308	-.0039	.0024
25	25	26	27	28	29	30	
1	-117.3294	-9.7682	.2128	-.16.9108	-.1215	-.0976	
2	908.9822	65.8626	-3.0141	130.0134	1.0126	-.0145	
3	50.7182	3.6506	2.7368	7.3364	.1034	.0843	
4	-.7944	-.0577	.0026	-.1134	-.0010	-.0000	
5	.0831	.0024	COCO	.0048	.0001	-.0001	
6	.0012	-.0001	-.0002	-.0002	.0000	-.0000	
7	-316.6905	942.9242	17.8449	-45.2560	10.4788	-.0285	
8	-24.2343	-135.0850	57.8057	-.4.3517	-1.0574	-.0373	
9	-12.3678	8.0100	-951.2289	-.1.8150	.1184	.6154	
10	-2.0283	5.8409	.1113	-.2980	.1040	-.0001	
11	-5.5901	-1.2213	* 3692	-.8460	-.0217	-.0005	
12	-3.3825	.0263	-5.7907	-.C577	.0005	.0047	
13	-35.6914	-4.1431	.1553	-.5.39C1	-.1066	-.0015	
31	31	32	33	34	35	36	
1	64.4249	-.2090	-.2670	151.4964	-.603.2470	.0130	
2	-14.4977	-.6969	2.8246	-1211.8622	4844.5237	.0044	
3	.6646	65.2746	* 2751	-.67.5363	270.4731	.0272	
4	.0123	.0005	-.0128	1.0030	-.4.1903	-.0000	
5	-.0276	-.0000	* 3392	-.0460	.2800	-.0001	
6	.0000	-.0005	* 0192	-.0019	-.0016	.0001	
7	64.7835	-.1302	-.1608	151.5603	-.604.4493	.2404	
8	-14.5627	-.6217	3.8585	-1211.7436	4848.8760	.2691	
9	.6082	65.3296	* 2186	-.67.6214	270.4114	-.3.7362	
10	.0123	.0006	-.0128	1.0031	-.4.1903	.0027	
11	-.0283	* 0001	* 3392	-.0460	.2799	.0026	
12	-.0000	-.0006	* 0192	-.0019	-.0017	-.0476	
13	.0464	-.0625	2.0991	-156.4287	.7086	-.0005	

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Table I - 3b. (Continued)

	37	38	39
1	-.3411	5.1230	-46.9317
2	3.5916	-89.6168	447.6456
3	.2764	-5.3597	25.1872
4	-.0032	.0775	-.3971
5	.0000	-.0012	.0511
6	.0000	.0001	-.0010
7	-1.3058	-75.0587	368.2866
8	-.1285	-36.4021	201.2621
9	-.0508	32.3123	-164.8960
10	-.0088	.0298	-.1558
11	-.0254	-.0714	.3673
12	-.0017	.0041	-.0153
13	-.1621	-.0200	183.7686

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Table I - 4a. Trajectory No. 4 (Positive Perturbations)

1	10447.1276	1749.5308	3	1.4798	1306.9278	4	135.5115	5	1.8323
1	-4031.8346	3521.5290	2	2.7343	-5350.9488	3	1632.1416	4	-7410
2	.6196	3.5638	3	10487.8141	9.7327	5	-1.5965	6	1505.4631
3			4	-3.0338	.0064	6	-1.4170		-0.003
4	3.4481		5	-4.4835	-0.061	7	-0.0649		-0.005
5			8	-4.4835	-0.2142	9	-0.0002		-0.0317
6	-0.0013	.0016	10	-209.2559	-1681.0598	11	-887.3705		1.5084
7			11	-509.1589	-6040.2156	12	-1279.9393		-1.6217
8			12	.1991	7.7621	13	354.4922		-1577.5839
9			13	-1.3009	-3.5220	14	9.5581		
10			14		.0002	15	-2.2848		
11			15	-1.3009	-0.002	16	-4.8005		-0.011
12			16	-4.1861	1.6006	17	-5.5790		
13			17	.0009	.0003	18	-2.6742		-0.046
1			18	-28.0553	1.5937	19	-9.1666		
2			19		-.0551	20	-2.1391		-9.6765
3			20			21	-.0003		
4			21			22	7.1758		-0.037
5			22			23	-64.3021		-9.6447
6			23			24			
7			24			25			
8			25			26			
9			26			27			
10			27			28			
11			28			29			
12			29			30			
13			30			31			
1			31			32			
2			32			33			
3			33			34			
4			34			35			
5			35			36			
6			36			37			
7			37			38			
8			38			39			
9			39			40			
10			40			41			
11			41			42			
12			42			43			
13			43			44			
1			44			45			
2			45			46			
3			46			47			
4			47			48			
5			48			49			
6			49			50			
7			50			51			
8			51			52			
9			52			53			
10			53			54			
11			54			55			
12			55			56			
13			56			57			
1			57			58			
2			58			59			
3			59			60			
4			60			61			
5			61			62			
6			62			63			
7			63			64			
8			64			65			
9			65			66			
10			66			67			
11			67			68			
12			68			69			
13			69			70			
1			70			71			
2			71			72			
3			72			73			
4			73			74			
5			74			75			
6			75			76			
7			76			77			
8			77			78			
9			78			79			
10			79			80			
11			80			81			
12			81			82			
13			82			83			
1			83			84			
2			84			85			
3			85			86			
4			86			87			
5			87			88			
6			88			89			
7			89			90			
8			90			91			
9			91			92			
10			92			93			
11			93			94			
12			94			95			
13			95			96			
1			96			97			
2			97			98			
3			98			99			
4			99			100			
5			100			101			
6			101			102			
7			102			103			
8			103			104			
9			104			105			
10			105			106			
11			106			107			
12			107			108			
13			108			109			
1			109			110			
2			110			111			
3			111			112			
4			112			113			
5			113			114			
6			114			115			
7			115			116			
8			116			117			
9			117			118			
10			118			119			
11			119			120			
12			120			121			
13			121			122			
1			122			123			
2			123			124			
3			124			125			
4			125			126			
5			126			127			
6			127			128			
7			128			129			
8			129			130			
9			130			131			
10			131			132			
11			132			133			
12			133			134			
13			134			135			
1			135			136			
2			136			137			
3			137			138			
4			138			139			
5			139			140			
6			140			141			
7			141			142			
8			142			143			
9			143			144			
10			144			145			
11			145			146			
12			146			147			
13			147			148			
1			148			149			
2			149			150			
3			150			151			
4			151			152			
5			152			153			
6			153			154			
7			154			155			
8			155			156			
9			156			157			
10			157			158			
11			158			159			
12			159			160			
13			160			161			
1			161			162			
2			162			163			
3			163			164			
4			164			165			
5			165			166			
6			166			167			
7			167			168			
8			168			169			
9			169			170			
10			170			171			
11			171			172			
12			172			173			
13			173			174			
1			174			175			
2			175			176			
3			176			177			
4			177			178			
5			178			179			
6			179			180			
7			180			181			
8			181			182			
9			182			183			
10			183			184			
11			184			185			
12			185			186			
13			186			187			
1			187			188			
2			188			189			
3			189			190			
4			190			191			
5			191			192			
6			192			193			
7			193			194			
8			194			195			
9			195			196			
10			196			197			
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Table I - 4a. (Continued)

	19	20	21	22	23	24
1	.0107	.0506	.0087	.0097	.0087	-.0002
2	8.5372	-8.4330	.0299	-.0625	.0299	-.0589
3	-.0479	-.0461	-.0028	.0618	-.0028	-.1069
4	-.0076	.0075	-.0000	-.0001	-.0000	.0000
5	-.0001	.0001	.0000	-.0000	.0000	-.0000
6	-.0000	-.0000	-.0000	-.0000	-.0000	-.0000
7	-3.5651	-120.1090	-.0087	-.0266	-.0087	.0246
8	-2.1625	29.2237	-.0299	-.1623	-.0299	-.0335
9	.0173	.0105	.0028	-124.1248	.0028	11.2016
10	-.0378	-.7556	.0000	-.0001	.0001	.0001
11	-.0942	.2360	-.0002	-.0007	-.0002	.0001
12	.0001	-.0000	.0000	-.7730	-.0000	.0986
13	-.6294	.6294	-.0010	-.0010	-.0010	
	25	26	27	28	29	30
1	28.3258	1.3026	-.1215	3.6183	.1178	-.0136
2	-739.7798	-57.1827	.9447	-104.8740	-.9031	.0013
3	-.8670	-.0377	-.5907	-.0763	-.0306	-.0281
4	.6197	.0505	-.0008	.0918	.0008	.0000
5	-.0178	-.0002	.0002	-.0011	.0001	-.0000
6	.0000	-.0000	.0001	-.0000	-.0000	-.0000
7	294.3942	-841.0600	.2646	41.9525	-10.7400	.0136
8	87.6161	207.4106	11.8357	13.2386	2.3112	-.0013
9	-.2485	.0403	868.5568	-.0005	.0086	.0281
10	2.2474	-5.1250	.0009	-.3323	-.0950	.0001
11	4.9574	1.5976	.0063	.7346	.0300	.0002
12	-.0070	-.0003	5.2327	-.0010	-.0000	.0001
13	33.8257	4.0640	-.0347	5.0024	.1069	.0015
	31	32	33	34	35	36
1	-14.3877	.1379	-.6590	-34.8372	138.9056	-.0392
2	7.3553	1.5285	-9.0729	969.8275	-3798.9263	-.0411
3	-.0406	-15.5486	-.0125	-1.3001	4.6382	-.0508
4	-.0063	-.0013	-.0206	-.8531	3.2525	-.0000
5	.0061	-.0000	-.3281	.0066	-.0635	-.0001
6	-.0000	.0003	.0004	-.0001	.0003	-.0000
7	-14.9951	.2734	-.5914	-.35.0895	138.6495	-.0112
8	7.4226	1.2923	-9.1384	970.2212	-3800.4495	-.0181
9	.0122	-15.5558	.0212	-1.1945	4.6935	3.5592
10	-.0065	-.0013	-.0207	-.8529	3.2517	.0001
11	.0062	-.0002	-.3282	.0069	-.0636	.0001
12	.0000	.0003	.0004	-.0001	.0003	.0389
13	-.0791	-.0332	-2.0986	161.0513	2.1667	.0005

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Table I - 4a. (Continued)

	37	38	39	
1	.0650	2.7713	4.7322	
2	-2.9403	77.9924	-318.5760	
3	-.0682	-.1021	-.2878	
4	.0026	-.0614	.0173	
5	-.0001	-.0034	.0593	
6	-.0000	-.0039	-.0055	
7	1.2213	154.4236	-270.8365	
8	.3625	1.9434	-139.3025	
9	.0172	-66.5917	94.1989	
10	.0098	-.0333	.0923	
11	.0219	.628	-.2338	
12	-.0000	.0080	-.0334	
13	.1489	-.0300	-167.7054	

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Table I - 4b. Trajectory No. 4 (Negative Perturbations)

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Table I - 4b. (Continued)

	19	20	21	22	23	24	
1	-.0967	-.1727	.0044	-.0094	-.0266	-.0174	
2	-3.4390	8.6090	.0149	-.0426	-.0435	-.0598	
3	-.0449	-.0255	-.0014	-.1364	-.024C	-.0055	
4	.0075	-.0076	-.00CC	.00C1	.0001	.0001	
5	.0002	-.0001	.0000	-.00C0	-.0000	-.0000	
6	-.0000	-.0000	-.0000	-.0006	-.0000	-.0000	
7	3.5609	120.1128	-.0044	.C4C2	-.0044	.0294	
8	2.1313	-29.2550	-.0149	.1610	-.0149	-.0307	
9	.0136	.0264	.0014	124.1529	.0014	-11.1960	
10	.0379	.7558	-.00C1	.0004	.0001	.0001	
11	.0941	-2360	-.00C3	.0612	.0001	.0002	
12	-.0001	.0000	-.00CC	.7730	.0000	-.0986	
13	.6294	-.6299	-.0015	.0015	.0010	.0024	
	25	26	27	28	29	30	
1	223.6212	-21	-.5634	-.0627	-.3.7859	-.1158	
2	742.3220	58.2716	1.0280	105.1441	1.2077		
3	-.9849	-.1061	.4961	-.1562	-.0253		
4	-.6509	-.0519	-.00C9	-.6921	-.0011	.0000	
5	.0972	.0002	.0032	.0012	.0001	.0001	
6	-.3001	-.0000	-.00C2	-.00C0	-.0000	-.0000	
7	-.295.3407	841.0719	-.3335	41.9925	10.7535	-.0044	
8	-.85.7042	-2C5.8981	-.3124	-13.2218	-2.3125	-.0149	
9	.2753	-.0088	-86E.5545	.0553	.0195	.0014	
10	-.2.2847	5.1259	-.0029	.3325	.0946	.0000	
11	-4.9866	-1.5980	-.0071	-.7352	-.0298	-.0001	
12	.0070	-.00C3	-5.2327	.0010	.0000	-.0001	
13	-34.0166	-4.1299	-.0351	-.0054	-.1055	-.0005	
	31	32	33	34	35	36	
1	15.0148	.1523	.5735	34.7800	-136.1717	-.0175	
2	-4.5375	1.5837	9.1248	-970.0345	3878.4938	-.0133	
3	-.0225	15.4883	-.0479	1.1789	-4.7748	-.0261	
4	.0039	-.0014	.0267	.8239	-3.3225	.0000	
5	-.0065	-.00C1	.3282	-.0180	.0576	.0001	
6	-.0000	-.0003	-.0004	.0000	-.0005	.0000	
7	15.6554	.2570	.5784	34.6669	-135.4308	-.0015	
8	-4.8362	1.2479	9.0936	-970.4230	3879.3774	-.0256	
9	.0017	15.5654	-.0170	1.2148	-4.7732	-.5551	
10	.0041	-.0013	.0207	.8238	-246.2447	-.0001	
11	-.0065	-.0001	.3221	-.0174	81.9786	-.0001	
12	.0000	-.0003	-.00C4	.0001	120.9874	-.0389	
13	.0142	-.0327	2.0951	-161.1367	-2.3284	-.0005	

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Table I - 4b. (Continued)

	37	38	39
1	-.2715	-.2842	-.5•6828
2	.3•1215	-.79•2869	.318•8155
3	-.0312	.0227	-.4703
4	-.0027	.0700	-.2829
5	.0000	.0005	-.0013
6	-.0000	-.0004	-.0003
7	-.1•2208	-.68•7332	.270•6268
8	-.4085	-.30•8418	.140•0990
9	.0150	.23•9120	-.94•0667
10	-.0100	.0245	-.1225
11	-.0222	-.0599	.2596
12	.0000	-.0037	•0461
13	-.1504	.0300	.168•C497

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Table I - 5a. Trajectory No. 5 (Positive Perturbations)

	1	2	3	4	5	6
1	10370.9325	3043.1133	-17.2596	2147.7437	326.0931	44.9590
2	-5182.9823	2805.4768	2149.4017	-5472.5486	1338.2708	-81.6167
3	563.8176	1469.4427	10210.9656	2513.2819	-55.3100	2123.6167
4	4.4077	-2.4137	-1.8849	4.6938	-1.1689	.0722
5	-4.4449	-1.3147	.0047	-8917	-1483	-.0156
6	-.0213	-.0104	-.0682	-.0537	.0066	-.0217
7	-224.4756	-1203.8482	-322.4433	-1378.0494	-1185.9188	-65.8165
8	-799.2995	-6106.3522	268.9344	-3975.2805	-1934.8814	-771.8275
9	42.2888	3306.3394	406.5228	2331.4571	618.1686	-1467.2033
10	-1.1627	-3.1331	-1.8832	-5.4420	-5.4231	-.2321
11	-4.0227	1.4029	.5333	3.0859	-8.6255	-1.8029
12	-.0177	-.5385	2.6534	-.5311	1.7543	-9.3447
13	-21.7387	1.7833	-5.7121	10.7945	-54.4045	16.4040
	7	8	9	10	11	12
1						
2						
3						
4						
5						
6						
7	10618.9851	4246.0615	305.2519	3525.8506	1512.0326	110.7138
8	-4386.5450	8911.8346	1879.9538	-1497.8217	3274.5076	688.8024
9	526.5538	-1836.7234	9802.5492	181.8546	-673.7381	3590.8231
10	5.5835	.7148	-.0013	10.1364	4.2531	.3054
11	-.4242	-2.7208	-.5298	-3.9775	8.4775	1.7873
12	-.0940	.5283	-2.7283	.4770	-1.7481	9.3224
13						
	13	14	15	16	17	18
1	-.4928	.0895	2.4721	-.5478	.0892	4.6523
2	-.1980	1.7776	-.8886	-.2660	2.4256	-1.4140
3	-.7416	2.4157	-.0869	-.8864	3.6110	-.2770
4	•0002	-.0015	•0007	•0002	-.0021	•0014
5	•0001	-.0000	•0010	•0002	•0000	•0019
6	-.0001	•0000	-.0001	•0002	•0002	•0001
7	65.6209	-188.3495	-1190.6520	78.2136	-214.1032	-1357.4216
8	31.9156	-546.8636	241.4056	39.3162	-621.3418	269.2066
9	76.1612	-1039.1665	86.7076	92.7779	-1185.9971	102.4403
10	•4989	-.1.0746	-6.9656	.6222	-1.2882	-8.3741
11	•3146	-.3.0430	1.1228	.4044	-3.6538	1.3030
12	•6913	-.5.9253	•6502	•8811	-7.1467	•8125
13	-.0010	-.0088	.0054	-.0010	-.0087	.0053

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Table I - 5a. (Continued)

	19	20	21	22	23	24
1	-.8546	1.6561	.8679	-.2928	-.0734	-.1040
2	11.2340	-11.4792	-6.5202	6.8614	-7556	-.6508
3	-5.5450	5.5176	3.1541	-2.9115	-3659	.2026
4	-.0099	.0101	.0057	-.0060	-.0007	.0006
5	-.0001	-.0004	-.0003	-.0001	-.0001	-.0000
6	-.0004	-.0002	-.0001	-.0002	-.0001	-.0001
7	-4.0643	-175.6217	2.3988	-30.8331	7.5188	2.3673
8	-.1406	36.4646	-.1021	-.82.5151	-.1.3810	6.2204
9	1.6858	11.4775	-.8524	-155.8335	-.5875	12.0675
10	-.0363	-1.0148	.0172	-.1799	.0538	.0215
11	-.1027	2711	-.0443	-.5057	-.0149	-.0618
12	.0653	.0335	-.0283	-.8643	-.0016	-.1061
13	-.7227	.7212	.3149	-.3267	-.0493	.0459
	25	26	27	28	29	30
1	143.0284	9.8858	4.8902	20.4722	.4058	-.0196
2	-1067.3429	-73.1338	-.43.7717	-155.1153	-.1.3875	-.3115
3	518.8251	35.4774	18.9693	75.5035	.6717	.0903
4	.9277	.0639	.0382	.1351	.0012	.0003
5	-.0461	-.0022	-.0010	-.0060	-.0000	.0001
6	-.0164	-.0016	-.0006	-.0025	-.0000	.0000
7	401.1382	-1205.2451	211.2614	58.0254	-13.3110	1.3727
8	-.50.7389	255.1861	568.2534	-.6.8239	2.2616	3.5408
9	-125.1434	75.9591	1C66.8225	-18.4614	1.1613	6.7993
10	2.3444	-6.6314	1.1722	.3523	-.1212	.0095
11	5.4064	1.7675	3.2866	.8317	.0327	.0269
12	-3.4717	.2160	5.6299	-.5333	.0044	.0470
13	38.9683	4.4067	1.9888	5.9756	.1216	.0176
	31	32	33	34	35	36
1	-.58.0548	-.3.0540	.2095	-.189.0886	747.8251	-.0573
2	24.1651	-29.5819	-.3.3138	1476.1301	-5780.8528	.0386
3	.2972	-51.5841	1.6602	-.718.3324	2811.9893	-.0565
4	-.0208	.0255	.0099	-.1.2927	4.9552	-.0000
5	-.0248	-.0014	-.3203	*.1095	-.2964	-.0001
6	-.0002	-.0004	-.0004	-.0021	-.0686	*.0001
7	-.58.4906	-2.9291	.1468	-.189.4024	-380.9539	3.5806
8	24.2453	-29.6401	-.3.3209	1476.1282	-5718.2119	2.1397
9	.3601	-51.6840	1.6488	-.718.3117	2776.8900	4.7492
10	-.0210	.0255	.0099	-.1.2929	4.9552	.0359
11	-.0247	-.0010	-.3203	*.1093	-.2964	.0260
12	-.0005	-.0006	-.1587	-.0021	-.0689	.0558
13	-.1680	.0610	-.2.0986	149.0273	-.4491	-.0019

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Table I - 5a. (Continued)

	37	38	39
1	.4502	-5.4895	1048.7483
2	-4.3313	93.2872	-683.8071
3	2.1591	-49.8296	337.5466
4	.0038	-.0808	* 5520
5	-.0002	.0013	-.0128
6	.0001	.0012	-.0142
7	1.6923	-.0921	-25.3565
8	-1537	-54.9237	395.4854
9	-5277	-88.9124	581.1807
10	.0104	.0786	-.5426
11	.0252	-.0135	* 1008
12	-.0159	.0032	-.0226
13	.1796	.0269	-203.6628

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Table I - 5b. Trajectory No. 5 (Negative Perturbations)

	1	2	3	4	5	6
1	-10400.2579	-3037.0248	22.2716	-2167.0217	-332.6618	-45.6358
2	5182.3661	-2866.2036	-2153.3175	5482.5724	-1346.2516	82.2370
3	-567.9752	-1472.0798	-10213.0723	-2518.6289	56.7696	-2128.7051
4	-4.4367	2.4249	1.8439	-4.7128	1.1780	-0.0745
5	4.5182	1.2870	.0069	.9632	.1058	.0283
6	-0.0149	.0363	.6835	.0149	.0149	.0134
7	213.8552	1213.4920	327.0250	1358.5854	1179.3906	65.0618
8	794.7218	6105.3545	-273.8216	3982.5136	1929.3740	770.8587
9	-41.4491	-3309.1970	-4C9.3296	-2336.0276	-617.0482	1462.1295
10	1.1070	3.1643	1.8416	5.4251	5.4313	.2310
11	4.0936	-1.4374	-5.239	-3.0144	8.5840	1.8156
12	-.0197	.5634	-2.6410	.4918	-1.7335	9.3362
13	22.1835	-1.9658	5.7484	-10.4526	54.1757	-16.2827
	1	2	3	4	5	6
	7	8	9	10	11	12

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-4.1841-110.6551  
-1512.1716-3274.4785  
-686.8033-3590.8145  
-1712-.3053  
-.0015-4.2543  
-1.2543-8.4774  
-1.7873-1.7480  
-9.3224-4.0000  
-0.0001-3.6117  
-0.0001-4.2543  
-1.2543-8.4774  
-1.7873-1.7480  
-9.3224-4.0000  
-0.0001-3.6117  
-0.0001-4.2543  
-1.2543-8.4774  
-1.7873-1.7480  
-9.3224-4.0000  
-0.0001-3.6117  
-0.0001-4.2543  
-1.2543-8.4774  
-1.7873-1.7480  
-9.3224-4.0000  
-0.0001-3.6117  
-0.0001-4.2543  
-1.2543-8.4774  
-1.7873-1.7480  
-9.3224-4.0000  
-0.0001-3.6117  
-0.0001-4.2543  
-1.2543-8.4774  
-1.7873-1.7480  
-9.3224-4.0000  
-0.0001-3.6117  
-0.0001-4.2543  
-1.2543-8.4774  
-1.7873-1.7480  
-9.3224-4.0000  
-0.0001-3.6117  
-0.0001-4.2543  
-1.2543-8.4774  
-1.7873-1.7480  
-9.3224-4.0000  
-0.0001-3.6117  
-0.0001-4.2543  
-1.2543-8.4774  
-1.7873-1.7480  
-9.3224-4.0000  
-0.0001-3.6117  
-0.0001-4.2543  
-1.2543-8.4774  
-1.7873-1.7480  
-9.3224-4.0000  
-0.0001-3.6117  
-0.0001-4.2543  
-1.2543-8.4774  
-1.7873-1.7480  
-9.3224-4.0000  
-0.0001-3.6117  
-0.0001-4.2543  
-1.2543-8.4774  
-1.7873-1.7480  
-9.3224-4.0000  
-0.0001-3.6117  
-0.0001-4.2543  
-1.2543-8.4774  
-1.7873-1.7480  
-9.3224-4.0000  
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-0.0001-4.2543  
-1.2543-8.4774  
-1.7873-1.7480  
-9.3224-4.0000  
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-0.0001-4.2543  
-1.2543-8.4774  
-1.7873-1.7480  
-9.3224-4.0000  
-0.0001-3.6117  
-0.0001-4.2543  
-1.2543-8.4774  
-1.7873-1.7480  
-9.3224-4.0000  
-0.0001-3.6117  
-0.0001-4.2543  
-1.2543-8.4774  
-1.7873-1.7480  
-9.3224-4.0000  
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-1.2543-8.4774  
-1.7873-1.7480  
-9.3224-4.0000  
-0.0001-3.6117  
-0.0001-4.2543  
-1.2543-8.4774  
-1.7873-1.7480  
-9.3224-4.0000  
-0.0001-3.6117  
-0.0001-4.2543  
-1.2543-8.4774  
-1.7873-1.7480  
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-1.2543-8.4774  
-1.7873-1.7480  
-9.3224-4.0000  
-0.0001-3.6117  
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-1.2543-8.4774  
-1.7873-1.7480  
-9.3224-4.0000  
-0.0001-3.6117  
-0.0001-4.2543  
-1.2543-8.4774  
-1.7873-1.7480  
-9.3224-4.0000  
-0.0001-3.6117  
-0.0001-4.2543  
-1.2543-8.4774  
-1.7873-1.7480  
-9.3224-4.0000  
-0.0001-3.6117  
-0.0001-4.2543  
-1.2543-8.4774  
-1.7873-1.7480  
-9.3224-4.0000  
-0.0001-3.6117  
-0.0001-4.2543  
-1.2543-8.4774  
-1.7873-1.7480  
-9.3224-4.0000  
-0.0001-3.6117  
-0.0001-4.2543  
-1.2543-8.4774  
-1.7873-1.7480  
-9.3224-4.0000  
-0.0001-3.6117  
-0.0001-4.2543  
-1.2543-8.4774  
-1.7873-1.7480  
-9.3224-4.0000  
-0.0001-3.6117  
-0.0001-4.2543  
-1.2543-8.4774  
-1.7873-1.7480  
-9.3224-4.0000  
-0.0001-3.6117  
-0.0001-4.2543  
-1.2543-8.4774  
-1.7873-1.7480  
-9.3224-4.0000  
-0.0001-3.6117  
-0.0001-4.2543  
-1.2543-8.4774  
-1.7873-1.7480  
-9.3224-4.0000  
-0.0001-3.6117  
-0.0001-4.2543  
-1.2543-8.4774  
-1.7873-1.7480  
-9.3224-4.0000  
-0.0001-3.6117  
-0.0001-4.2543  
-1.2543-8.4774  
-1.7873-1.7480  
-9.3224-4.0000  
-0.0001-3.6117  
-0.0001-4.2543  
-1.2543-8.4774  
-1.7873-1.7480  
-9.3224-4.0000  
-0.0001-3.6117  
-0.0001-4.2543  
-1.2543-8.4774  
-1.7873-1.7480  
-9.3224-4.0000  
-0.0001-3.6117  
-0.0001-4.2543  
-1.2543-8.4774  
-1.7873-1.7480  
-9.3224-4.0000  
-0.0001-3.6117  
-0.0001-4.2543  
-1.2543-8.4774  
-1.7873-1.7480  
-9.3224-4.0000  
-0.0001-3.6117  
-0.0001-4.2543  
-1.2543-8.4774  
-1.7873-1.7480  
-9.3224-4.0000  
-0.0001-3.6117  
-0.0001-4.2543  
-1.2543-8.4774  
-1.7873-1.7480  
-9.3224-4.0000  
-0.0001-3.6117  
-0.0001-4.2543  
-1.2543-8.4774  
-1.7873-1.7480  
-9.3224-4.0000  
-0.0001-3.6117  
-0.0001-4.2543  
-1.2543-8.4774  
-1.7873-1.7480  
-9.3224-4.0000  
-0.0001

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Table I - 5b. (Continued)

1	1.2276	-1.0375	-2.2979	-	8038	-	.0193	-	.0497
2	-11.2965	11.3315	6.5722	-6.	7467	-	-6093	-	.7581
3	5.5221	-5.5336	-3.2797	2.	7827	-	.3474	-	.2881
4	.0099	-.0099	-.0058	.0059	.0005	-	.0005	-	-.0006
5	-.0002	-.0002	-.0000	-.0003	-.0000	-	-.0000	-	.0000
6	-.0002	-.0003	.0002	-.0000	-.0000	-	-.0000	-	.0001
7	4.0650	175.6260	-2.3972	30.	8377	-	-7.5180	-	-2.3661
8	.1510	-36.4021	*1441	82.	5899	1.	3932	-	-6.1924
9	-1.6894	-11.5076	.8774	155.	8138	-	.5848	-	-12.0581
10	.0361	1.0149	-.0175	.1796	.1796	-	-.0538	-	-.0217
11	.1022	-.2713	-.0455	.5042	.5042	-.0147	-.0147	-	-.0623
12	-.0650	-.0333	.0292	.8651	.8651	-.0017	-.0017	-	-.1056
13	.7192	-.7241	-.3237	.3154	.3154	.0483	.0483	-	-.0493
								30	
1	25	26	27	28	29				
2	1071.4276	75.6425	46.2282	155.3554	1.5547				.4576
3	-521.0078	-36.6056	-20.1371	-75.5620	-.7173				-.1550
4	-.9356	-.0662	-.0404	-.1354	-.0014				-.0004
5	.0942	.0023	.0010	.0061	.0001				-.0000
6	-.0081	.0018	.0007	.0026	.0001				.0002
7	-401.4333	1204.9602	-211.6080	-.58.0175	13.3115				-.1.3709
8	54.-6328	-252.9419	-566.0078	6.9492	-2.2387				-.3.5041
9	123.-2093	-77.0279	-1067.9244	18.4230	-.1.1326				-.6.7943
10	-2.3573	6.6314	-.1.1748	-.3528	-.1210				-.0098
11	-5.3775	-1.7689	-.3.2885	-.8328	-.0333				-.0278
12	3.4590	-.2153	-.5.6259	.5342	-.0036				-.0463
13	-38.7671	-4.4902	-2.0762	-.5.9834	-.1270				-.0234
								36	
1	59.4087	3.9033	-.0828	189.6983	-.750.9100				.0669
2	-17.6848	36.0574	3.3489	-1475.5280	5898.6600				.1210
3	-4.5618	47.4371	-1.6446	717.8773	-2870.9822				.0248
4	.0152	-.0311	-.0100	1.2373	-.5.0641				-.0001
5	-.0256	-.0018	.3204	-.0601	.3363				-.0000
6	.0001	-.0002	-.1587	-.0226	.0318				-.0001
7	59.2780	3.6543	-.0815	189.4440	-.751.6494				-.3.5786
8	-17.7400	36.1346	3.3680	-1475.5715	5898.7750				-.2.1057
9	-4.4785	47.5307	-1.6526	717.9245	-2870.9917				-.4.7537
10	.0152	-.0312	-.0100	1.2372	-.5.0644				-.0362
11	-.0257	-.0020	.3203	-.0603	.3359				-.0268
12	.0003	-.0001	-.1587	-.0226	.0321				-.0553
13	.0322	-.1963	2.0931	-148.7031	.6134				-.0033

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Table I - 5b. (Continued)

	37	38	39
1	-.0028	5.5758	-66.5669
2	4.4648	-90.7578	632.0475
3	-2.2685	49.4336	-309.7795
4	-.0039	.0786	-.5579
5	-.0060	-.0015	.0615
6	.0001	-.0011	-.0099
7	-1.6911	.1541	25.1491
8	.1817	54.8974	-398.2378
9	.5415	88.8996	-583.5161
10	-.0107	-.0779	.5442
11	-.0263	.0139	-.14C9
12	.0168	-.0023	-.0019
13	-.1879	-.0327	204.6801

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TABLE II  
3 SIGMA DIFFERENCES FOR LEM  
HOHMANN TRANSFER PHASE

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1	10502.2542	222.5602	-2.1206	231.5576	4.0916	-.3291
2	-397.1405	10295.5743	3.6500	-11.9668	293.3043	-2039
3	.0205	.0021	10494.4886	-.0127	.0152	377.2646
4	.6252	-.9.0177	-.1726	-.0683	-.0213	-.3141
5	-7.3395	-.2576	•3783	-.1966	-.2509	.0894
6	.0000	-.0005	-.2881	.0004	-.0006	9.8114
7	-3.2546	1115.6432	-2.2985	1148.1956	8.0940	-.2273
8	-58.5109	-193.4846	3.6581	.3375	-86.4270	-1853
9	.0090	.0011	-.0252	.0086	.0024	-2.7378
10	.0452	-.9.0218	-.1735	-10.0737	-.3438	-.3140
11	-7.3347	.0319	.3780	.1260	-10.2405	.0894
12	.0003	-.0005	.0018	.0004	-.0007	-.1834
13	-22.2457	1.2045	1.1132	1.6423	-30.9498	.5669
1						
2						
3						
4						
5						
6						
7	10505.6843	338.5209	.0370	379.9477	12.2537	-.2336
8	-338.6600	10489.0052	-.0188	-12.2508	379.7358	-.0008
9	.063	.0332	10494.4535	-.0029	.0005	379.9328
10	.5843	.0042	.0010	10.0054	.3225	.0006
11	-.0046	-.2914	-.0001	-.3224	9.9896	-.0001
12	-.0002	-.0000	-.2921	.0000	.0000	9.9947
13						
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Table II - 1a. (Continued)

	19	20	21	22	23	24
1	.1245	.0044		.0551		-.0366
2	-.1277	-.0562		.0005		-.0023
3	-.0177	-.0130		.0334		-.0931
4	-.0000	-.0001		-.0000		.0000
5	-.0029	-.0028		-.0000		.0000
6	-.0000	-.0000		-.0001		-.0034
7	-.3906	-.0596		-.0366		-.0327
8	-.0179	.0254		-.0003		-.0004
9	-.0058	-.0193		-.0932		.3172
10	-.0278	-.0014		-.0000		.0000
11	-.0032	.0031		-.0000		-.0000
12	.0000	.0000		-.0064		.0250
13	-.0098	.0000		-.0000		-.0000
	25	26	27	28	29	30
1	1.6047	.4623	.0253	-.0598		.0634
2	-.8511	-.9392	-.1092	-.0273		-.2741
3	-.0657	-.0596	1.1961	-.0176		.0128
4	.0908	-.0111	.0004	.0005		.0000
5	.0312	-.2412	-.0089	-.0001		-.0131
6	-.0001	.0000	.2872	-.0000		.0000
7	9.4810	-1.9900	-.0039	.0690		-.1283
8	.8011	1.6736	-.0544	.0072		.1163
9	-.0534	.0166	10.2169	-.0116		-.0110
10	.5385	-.1076	.0005	.0066		-.0060
11	.1273	.2061	-.0087	.0010		.0146
12	-.0001	.0000	.7451	-.0000		.0000
13	.4292	.6111	-.0294	.0032		.0442
	31	32	33	34	35	36
1	-2.7465	.0309	.0880	.3070	.2411	.1092
2	.4138	.1109	-2.5809	2.5409	-.11.8718	-.5.7109
3	-.0138	-2.6861	-.0139	.0067	.0258	.0203
4	.0035	.0000	.0130	-.0039	.0249	.0132
5	.0089	.0002	-.3254	.0970	-.3783	-.4063
6	.0000	.0031	-.0000	-.0000	-.0001	-.0016
7	-2.8799	.0069	.0835	-.0793	.2203	.6132
8	.3737	.0561	-2.5545	2.4273	-.11.8835	-.5.6993
9	-.0046	-2.6665	.0002	-.0168	-.0132	.1787
10	.0035	.0000	.0130	-.0039	.0249	.0132
11	.0088	.0000	-.3254	.0969	-.3783	-.4003
12	.0000	.0032	.0000	-.0000	-.0001	-.0016
13	.0179	-.0093	-.9836	.2203	-.1.1655	-.1.3930

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Table II - 1a. (Continued)

	37	38	39
1	.0316	.0002	-.0000
2	3.9230	.0482	-.0010
3	.0210	-.0016	-.0009
4	-.0093	-.0001	-.0000
5	.1231	.0021	.0010
6	.0000	-.0000	-.0000
7	-.0879	.0001	.0000
8	3.8790	.0424	.0136
9	-.0145	-.0014	-.0005
10	-.0093	.0001	-.0000
11	.1232	.0022	.0010
12	-.0000	.0000	.0000
13	.3733	1.7340	1.9860

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Table II - 1b. Trajectory No. 1 (Negative Perturbations)

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Table II - Ib. (Continued)

19	20	21	22	23	24
1	-.0599	-.0042	-.0046	-.0366	
2	-.0642	-.1246	-.0000	-.0004	
3	-.0165	.0107	-.0149	-.0932	
4	-.0701	.0000	-.0000	-.0000	
5	-.0027	.0030	-.0000	-.0000	
6	-.0066	.0000	-.0001	-.0034	
7	.3966	.0045	-.0231	-.0270	
8	.0269	-.0252	-.0001	.0015	
9	.0057	-.0141	.0747	-.3357	
10	.0277	.0014	-.0000	-.0000	
11	.0036	-.0033	-.0000	-.0000	
12	-.0056	.0000	-.0064	-.0250	
13	.0063	-.0100	-.0000		

25	26	27	28	29	30
1	-.9562	.9658	-.0261	-.0037	
2	1.1074	7.0964	-.1181	-.0001	
3	-.0909	-.0959	-1.1884	-.2726	
4	-.0307	.0121	-.0004	-.0057	
5	-.0318	.0264	-.0088	.0005	
6	-.0010	-.0000	-.2872	-.0128	
7	-.6610	1.9890	.0035	-.0000	
8	-.7751	-.9436	-.0590	-.0054	
9	-.0032	-.0074	-10.2130	-.0069	
10	-.5386	.1086	.0003	-.0067	
11	-.1275	-.2416	-.0088	-.0011	
12	.0001	-.0000	-.7451	-.0000	
13	-.4351	-.7173	-.0294	-.0034	-.0454

31	32	33	34	35	36
1	2.8253	-.0309	-.0825	-.2164	-.1477
2	-.2312	-.1109	2.5557	-2.6555	3.9955
3	-.0236	2.6861	-.0032	-.0042	-.0371
4	-.0038	.0000	-.0130	-.0050	-.0040
5	-.0060	-.0002	.3254	-.1269	.2201
6	-.0000	-.0031	-.0000	-.0000	.0000
7	2.8217	-.0069	-.1432	-.0234	-.1971
8	-.2168	-.0561	2.5660	-2.6698	10.4637
9	-.0192	2.6665	-.0191	-.0144	-.0292
10	-.0038	.0000	-.0130	-.0051	-.0176
11	-.0062	.0000	.3253	-.1272	1990
12	-.0000	-.0032	.0000	-.0000	-.0000
13	.0066	-.0083	.9836	-.74.6450	.5985

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Table II - 1b. (Continued)

	37	38	39	35
1	.1745	-.0604		.0000
2	-4.2255	-.0115		.0070
3	-.0440	-.0183		.0002
4	.0114	.0001		-.0000
5	-.1761	-.0031		-.0009
6	.0000	.0000		-.0000
7	.0317	-.0001		-.0000
8	-4.2957	-.0401		-.0119
9	-.0041	.0014		.0004
10	.0114	.0001		.0000
11	-.1761	-.0023		-.0011
12	.0000	-.0000		.0000
13	-.5330	-1.8060		-2.0250

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Table II - 2a. Trajectory No. 2 (Positive Perturbations)

1	-10502.2301	2	259.11329	3	1.7438	4	272.7947	5	6.0361	6	2669
2	-423.7389	10294.5837	-1	-1.7429	-13.5486	3	334.9618	-	-2.8219	-	
3	-0.532	0.60	10493.3680	-	-0.0484	4	0.0162	-	417.2341	-	
4	-5.643	-0.072	-0.0237	-	-0.0496	5	-0.0610	-	-	-	
5	-5.9174	-0.1363	-0.0489	-	-0.0844	6	-0.0860	-	-2.2306	-	
6	-0.606	0.013	-0.3162	-	-0.0063	7	-0.0016	-	9.8123	-	
7	-4.3831	-114.9892	-1.7890	-146.9497	-9.1536	8	-4.7331	-	-4.8888	-	
8	-54.1201	-191.9877	-1.7135	1.4804.	-84.7331	9	-2.8163	-	-	-	
9	-0.604	0.281	0.0366	-0.0056	.0051	10	-2.6694	-	-	-	
10	-0.5753	-0.0121	.0227	-10.0561	-4.179	11	-10.0671	-	3.325	-	
11	-6.9113	.1834	-0.0467	-	-2.722	12	-0.0033	-	-2.300	-	
12	-0.0055	.0612	.0044	-	.0015	13	.0015	-	-1.813	-	
13	-20.9660	1.6290	-0.0497	-	2.0771	-	-30.4588	-	-4.215	-	
1	7	8	9	10	11	12	13	14	15	16	17
2	1	2	3	4	5	6	7	8	9	10	11
3	1	2	3	4	5	6	7	8	9	10	11
4	1	2	3	5	6	7	8	9	10	11	12
5	1	2	3	4	6	7	8	9	10	11	12
6	1	2	3	4	5	7	8	9	10	11	13
7	1	2	3	4	5	6	8	9	10	11	13
8	1	2	3	4	5	6	7	9	10	11	13
9	1	2	3	4	5	6	7	8	10	11	13
10	1	2	3	4	5	6	7	8	9	11	13
11	1	2	3	4	5	6	7	8	9	10	13
12	1	2	3	4	5	6	7	8	9	10	13
13	1	2	3	4	5	6	7	8	9	10	12
14	1	2	3	4	5	6	7	8	9	10	11
15	1	2	3	4	5	6	7	8	9	10	12
16	1	2	3	4	5	6	7	8	9	10	13
17	1	2	3	4	5	6	7	8	9	10	14
18	1	2	3	4	5	6	7	8	9	10	15

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Table II - 2a. (Continued)

	19	20	21	22	23	24
1	-1249	-0600		.0559		.0339
2	.0863	-.0480		-.0017		.0025
3	.0268	-.0127		.0320		-.1206
4	.0001	-.0002		-.0000		.0000
5	-.0010	-.0012		.0000		.0000
6	.0000	-.0000		-.0001		-.0034
7	-.3907	-.0600		-.0390		-.0245
8	-.0325	.0404		.0012		.0004
9	.0006	-.0133		-.0924		.3191
10	-.0276	-.0015		.0000		.0000
11	-.0051	.0049		-.0000		-.0000
12	-.0000	-.0000		-.0064		.0000
13	-.0154	-.0000		-.0000		.0249
	25	26	27	28	29	30
1	.3707	.0161	.0561	-.0000		.0552
2	-1.1652	-5.9134	-.0760	-.0012		-.1792
3	-.0490	.0134	1.1887	-.0001		.0158
4	.0950	-.0181	-.0000	.0005		-.0004
5	.0410	-.0912	-.0059	-.0000		.0047
6	.0003	-.0001	.2900	-.0000		.0000
7	9.6213	-2.0604	-.1028	.0687		-.1195
8	.8644	2.8255	-.0307	.0126		.1850
9	-.0010	-.0341	10.1428	-.0120		-.0172
10	.5424	-.1145	-.0003	.0066		-.0063
11	.1374	-.3555	-.0060	.0014		.0229
12	.0008	-.0002	.7474	.0000		-.0000
13	.4609	1.0639	-.0214	.0044		.0693
	31	32	33	34	35	36
1	-2.7200	.0309	.1749	-.0095		.0306
2	.3821	.1109	-.2.5472	1.9858		-.7959
3	.0143	-2.6861	.0323	.0129		-.2972
4	.0031	.0000	.0125	-.0015		.0376
5	.0036	.0002	-.3253	.0352		.0154
6	.0000	.0031	.0000	.0000		.0009
7	-2.7804	.0069	.0589	-.0097		.0101
8	.3226	.0561	-2.5296	1.9321		-.1461
9	-.0081	-2.6665	-.0152	.0080		.0143
10	.0031	.0000	.0125	-.0015		.0009
11	.0034	.0000	-.3253	.0350		.0310
12	-.0000	.0032	.0000	.0000		.0000
13	-.0320	-.0083	-.9834	74.3701		-.4430

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Table II - 2a. (Continued)

	37	38	39
1	-•.0013	2•.0353	-•.0938
2	3•.2374	460•7443	-•.0108
3	-•.0222	42•.0098	-•.0275
4	-•.0063	-•.0000	-•.0000
5	.0447	.0007	.0003
6	.0000	.0000	-•.0000
7	-•.0976	-•.0001	.0000
8	3•.2462	.0278	.0078
9	-•.0487	.0025	.0007
10	-•.0063	.0000	.0000
11	.0445	.0008	.0003
12	-•.0000	-•.0000	-•.0000
13	.1350	1•.7292	1•.9749

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Table II - 2b. Trajectory No. 2 (Negative Perturbations)

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Table II - 2b. (Continued)

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19	.0600	20	.1250	21	.0042	22	.0042	23	.0390	24	.0005
2	- .0480		.0994		.0006		.0006		.0005		.0926
3	.0127		.0280				-.0150				-.0000
4	-.0002		.0001				-.0000				-.0000
5	-.0012		.0010				-.0001				-.0001
6	-.0000		.0000				-.0001				.0034
7	.3908		-.0002				-.0212				-.0356
8	.0361		-.0399				-.0008				.0045
9	-.0003		-.0036				-.0756				-.3357
10	.0275		.0015				-.0000				.0000
11	.0048		-.0053				-.0000				.0000
12	.0000		-.0000				-.0064				-.0000
13	.0149		-.0156				-.0006				-.0249
		25	26	27	28	29	28	29	30	31	32
1	-.7596		-.4047		.1374		.0602		.0655		
2	1.0359		5.8640		-.0658		.0036		.2612		
3	.0256		-.0296		-1.1962		.0174		.0257		
4	-.0248		.0181		.0003		-.0005		.0002		
5	-.0402		.0811		-.0057		.0000		.0047		
6	-.0003		.0001		-.2900		.0000		.0000		
7	-.6212		2.0601		-.0788		-.1288		.0594		
8	-.8417		-2.9077		-.0269		-.0081		-.1834		
9	.0030		.0266		-1C.1954		-.0046		.0003		
10	-.5423		.1147		.0009		-.0066		.0063		
11	-.1368		-.3665		-.0056		-.0015		-.0233		
12	-.6008		.0002		-.7474		-.0000		.0000		
13	-.4638		-.1.0963		-.0199		-.0046		-.0701		
		31	32	33	34	35	34	35	36	37	38
1	2.9141		-.0309		-.1148		.0138		.1284		.897
2	-.1495		-.1109		2.5339		-.1.9658		9.4757		2.8791
3	.0126		2.6861		-.0165		-.0262		-.0188		-.0004
4	-.0034		.0000		-.0125		.0017		-.0132		.0013
5	-.0027		-.0002		3253		-.0430		-.0745		.0840
6	-.0000		-.0031		.0000		-.0000		.0000		.0000
7	2.7852		-.0069		-.1150		.0052		-.2245		-.0991
8	-.1878		-.0561		2.54C9		-.1.9964		9.4597		2.8728
9	.0053		2.6665		-.0008		.0012		-.0475		-.0827
10	-.0034		.0000		-.0125		.0017		-.0132		.0013
11	-.0028		.0000		3253		-.0430		-.0744		.0839
12	-.0000		-.0032		-.0000		.0000		-.0000		-.0000
13	.0159		-.0083		-.9836		-.74.3936		-.2221		.2530

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Table II - 2b. (Continued)

	37	38	39	35
1	.0280	.0964		.0956
2	-3.3154	-.0179		-.0058
3	-.0815	.0257		.0262
4	.0067	-.0000		-.0000
5	-.0590	-.0008		-.0004
6	-.0000	.0000		-.0000
7	.0007	-.0001		-.0000
8	-3.3659	-.0290		-.0079
9	.0105	-.0026		-.0007
10	.0067	.0000		-.0000
11	-.0589	-.0009		-.0004
12	-.0000	-.0000		.0000
13	-.1800	-1.8018		-2.0148

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Table II - 3a. Trajectory No. 3 (Positive Perturbations)

	1	2	3	4	5	6
1	10500.3811	198.7524	.2976	245.8612	4.9074	-.2250
2	-409.8542	10304.7344	.1688	-5.5730	316.9875	-.7530
3	-.0082	.0284	10494.0010	.0063	.0215	397.1022
4	.2975	-8.9822	.3033	-.0126	-.0069	-.0051
5	-.5716	-.0194	.0165	-.0223	-.0177	-.0064
6	-.0003	.0001	-.3019	.0060	.0001	9.8114
7	-.5488	-157.5868	-.1261	-153.9714	-.8.6102	-.1613
8	-53.2781	-183.1644	.1232	8.0263	-82.6883	-.6924
9	.0020	.0094	.0156	.0074	-.0077	-2.8359
10	-.3114	-8.9883	.0031	-10.0185	-.3464	-.0051
11	-6.5666	.2851	.0106	.3171	-10.0062	-.0065
12	.0009	.0001	.0020	-.0060	.0001	-.1827
13	-19.8308	-.6207	-.0395	-.5370	-30.2976	-.2568
	7	8	9	10	11	12
1	10506.2201	356.3381	.0304	399.9509	13.5765	.0172
2	-.356.5162	10437.8154	-.0184	-13.5748	399.6924	-.0010
3	-.0007	.0190	10493.8865	-.0140	.0003	399.9125
4	.6131	.0061	.0008	10.0059	.3395	.0000
5	-.0050	-.3058	.0000	-.3393	9.9884	.0000
6	-.0002	.0000	-.3061	.0000	.0000	9.9942
7	10506.2201	356.3381	.0304	399.9509	13.5765	.0172
8	-.0863	-.0275	-.0149	-.0455	-.0134	-.0009
9	.0020	.0000	-.0566	-.0009	-.0000	-.0635
10	-.4468	.0840	-.0275	-.6426	-.1119	.0004
11	-.0000	-.0000	-.0001	-.0000	-.0000	.0003
12	-.0000	-.0000	.0001	-.0000	-.0000	.0002
13	-.0169	-.0005	.0000	-.0238	-.0004	.0000
	13	14	15	16	17	18
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	32	33	34	35
36	37	38	39	40	41	42
43	44	45	46	47	48	49
50	51	52	53	54	55	56
57	58	59	60	61	62	63
64	65	66	67	68	69	70
71	72	73	74	75	76	77
78	79	80	81	82	83	84
85	86	87	88	89	90	91
92	93	94	95	96	97	98
99	100	101	102	103	104	105
106	107	108	109	110	111	112
113	114	115	116	117	118	119
120	121	122	123	124	125	126
127	128	129	130	131	132	133
134	135	136	137	138	139	140
141	142	143	144	145	146	147
148	149	150	151	152	153	154
155	156	157	158	159	160	161
162	163	164	165	166	167	168
169	170	171	172	173	174	175
176	177	178	179	180	181	182
183	184	185	186	187	188	189
190	191	192	193	194	195	196
197	198	199	200	201	202	203
204	205	206	207	208	209	210
211	212	213	214	215	216	217
218	219	220	221	222	223	224
225	226	227	228	229	230	231
232	233	234	235	236	237	238
239	240	241	242	243	244	245
246	247	248	249	250	251	252
253	254	255	256	257	258	259
260	261	262	263	264	265	266
267	268	269	270	271	272	273
274	275	276	277	278	279	280
281	282	283	284	285	286	287
288	289	290	291	292	293	294
295	296	297	298	299	300	301
302	303	304	305	306	307	308
309	310	311	312	313	314	315
316	317	318	319	320	321	322
323	324	325	326	327	328	329
330	331	332	333	334	335	336
337	338	339	340	341	342	343
344	345	346	347	348	349	350
351	352	353	354	355	356	357
358	359	360	361	362	363	364
365	366	367	368	369	370	371
372	373	374	375	376	377	378
379	380	381	382	383	384	385
386	387	388	389	390	391	392
393	394	395	396	397	398	399
399	400	401	402	403	404	405
406	407	408	409	410	411	412
413	414	415	416	417	418	419
420	421	422	423	424	425	426
427	428	429	430	431	432	433
434	435	436	437	438	439	440
441	442	443	444	445	446	447
448	449	450	451	452	453	454
455	456	457	458	459	460	461
462	463	464	465	466	467	468
469	470	471	472	473	474	475
476	477	478	479	480	481	482
483	484	485	486	487	488	489
490	491	492	493	494	495	496
497	498	499	500	501	502	503
504	505	506	507	508	509	510
511	512	513	514	515	516	517
518	519	520	521	522	523	524
525	526	527	528	529	530	531
532	533	534	535	536	537	538
539	540	541	542	543	544	545
546	547	548	549	550	551	552
553	554	555	556	557	558	559
560	561	562	563	564	565	566
567	568	569	570	571	572	573
574	575	576	577	578	579	580
581	582	583	584	585	586	587
588	589	590	591	592	593	594
595	596	597	598	599	600	601
602	603	604	605	606	607	608
609	610	611	612	613	614	615
616	617	618	619	620	621	622
623	624	625	626	627	628	629
630	631	632	633	634	635	636
637	638	639	640	641	642	643
644	645	646	647	648	649	650
651	652	653	654	655	656	657
658	659	660	661	662	663	664
665	666	667	668	669	670	671
672	673	674	675	676	677	678
679	680	681	682	683	684	685
686	687	688	689	690	691	692
693	694	695	696	697	698	699
699	700	701	702	703	704	705
706	707	708	709	710	711	712
713	714	715	716	717	718	719
720	721	722	723	724	725	726
727	728	729	730	731	732	733
734	735	736	737	738	739	740
741	742	743	744	745	746	747
748	749	750	751	752	753	754
755	756	757	758	759	760	761
762	763	764	765	766	767	768
769	770	771	772	773	774	775
776	777	778	779	780	781	782
783	784	785	786	787	788	789
790	791	792	793	794	795	796
797	798	799	800	801	802	803
804	805	806	807	808	809	800
801	802	803	804	805	806	807
808	809	810	811	812	813	814
815	816	817	818	819	810	811
812	813	814	815	816	817	818
819	810	811	812	813	814	815
816	817	818	819	810	811	812
813	814	815	816	817	818	819
810	811	812	813	814	815	816
817	818	819	810	811	812	813
814	815	816	817	818	819	810
811	812	813	814	815	816	817
818	819	810	811	812	813	814
815	816	817	818	819	810	811
812	813	814	815	816	817	818
819	810	811	812	813	814	815
816	817	818	819	810	811	812
813	814	815	816	817	818	819
810	811	812	813	814	815	816
817	818	819	810	811	812	813
814	815	816	817	818	819	810
811	812	813	814	815	816	817
818	819	810	811	812	813	814
815	816	817	818	819	810	811
812	813	814	815	816	817	818
819	810	811	812	813	814	815
816	817	818	819	810	811	812
813	814	815	816	817	818	819
810	811	812	813	814	815	816
817	818	819	810	811	812	813
814	815	816	817	818	819	810
811	812	813	814	815	816	817
818	819	810	811	812	813	814
815	816	817	818	819	810	811
812	813	814	815	816	817	818
819	810	811	812	813	814	815
816	817	818	819	810	811	812

Table II - 3a. (Continued)

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19	20	21	22	23	24	25	26	27	28	29	30
1	-.0137	-.0407				1	1.2085	-.4961	-.1188	.0554	-.0175
2	.0342	-.0654				2	-.9772	-.5.4830	-.0238	-.0263	-.2441
3	-.0281	-.0557				3	-.0844	-.0404	1.4338	-.0281	-.0262
4	.0002	-.0002				4	1.047	-.0218	.0002	-.0005	-.0004
5	.0004	-.0002				5	.0308	-.0262	-.0025	.0061	-.0012
6	.0000	.0000				6	-.0000	.0000	.0060	.0000	-.0000
7	-.3641	.0007				7	10.1700	-2.0574	.0178	.1399	-.0668
8	-.0431	.0527				8	.8749	3.6712	-.0132	.0098	-.2294
9	-.0256	-.0034				9	.0211	-.0136	10.8737	-.0009	-.0012
10	-.0275	-.0015				10	.5515	-.1179	.0001	.0067	-.0063
11	-.0057	.0059				11	.1269	.4200	-.0025	.0013	-.0264
12	-.0000	-.0000				12	.0000	.7556	.0000	-.0000	-.0000
13	-.0173	.0178				13	.4314	1.2575	-.0103	.0039	.0796
31	32	33	34	35	36						
1	-2.5264	.0309	.1436	-.1307	.1587						
2	.2472	.1109	-.2.7730	1.7029	-.9.9813						
3	-.0150	-2.6861	-.0377	-.0389	-.0802						
4	.0029	.0000	.0002	-.3254	.0087						
5	.0011	.0000	.0031	-.0000	.0000						
6	.0000	.0000	.0069	.1018	.0236						
7	-2.5119	.0561	-.2.7966	1.7312	-.9.0423						
8	.2814	.0122	-2.6665	.0186	-.0120						
9	.0122	.0000	.0029	.0110	-.0008						
10	.0029	.0009	.0000	-.3254	.0087						
11	.0009	.0000	.0032	-.0000	.0000						
12	.0000	.0000	.0352	-.9834	74.2917						
13	-.0352	-.0083	-.0000	-.9834	-.0630						

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Table II - 3a. (Continued)

	37	38	39
1	-.0924	.0003	.0000
2	2.9842	.0193	.0010
3	-.0642	-.0001	-.0000
4	-.0054	.0000	.0000
5	.0111	.0002	.0001
6	.0000	.0000	.0000
7	-.0476	.0004	.0001
8	2.9872	.0260	.0076
9	.0241	-.0002	-.0001
10	-.0053	.0000	-.0000
11	.0109	.0003	.0001
12	.0000	-.0000	.0000
13	.0340	1.7280	1.9689

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Table II - 3b. Trajectory No. 3 (Negative Perturbations)

1	-10501.9766	-233.8713	1.2748	-245.0709	-4.8122	-0.0618
2	414.0543	-10297.0237	-2.2855	11.2890	-307.8690	-0.7513
3	-.0097	.0324	-1C493.9949	.0613	-.0266	-397.1163
4	-.5343	8.9986	.1212	.0337	.0362	-.0004
5	6.6523	.0536	-.2621	.0501	.0208	-.0122
6	-.0004	.0001	.3030	.0000	.0001	-9.8121
7	4.1496	122.2273	1.3262	154.7311	8.7059	.0317
8	57.5971	190.8693	-2.3284	-2.2979	91.8133	-.7591
9	-.0213	-.0028	-.0077	-.0022	.0013	2.8209
10	.0756	9.C032	.1205	10.C396	.3758	-.0004
11	6.6470	-.2512	-.2621	-.2893	10.0090	-.0122
12	-.0002	.0031	-.0026	.0000	.0001	.1821
13	20.1522	-1.7951	-.7955	-1.8953	30.2799	.2405
1	7	8	9	10	11	12
2						
3						
4						
5						
6						
7	-10506.2213	-356.2680	.0007	-399.8759	-13.5748	.0073
8	356.5184	-10487.8163	.0184	13.5748	-399.6905	.0010
9	-.0010	-.C190	-1C493.8242	-.0240	-.0012	-399.9249
10	-.6148	-.C046	.0007	-10.C059	-.3395	-.0000
11	.0051	.3068	.0000	.3394	-9.9884	.0000
12	-.0003	.0000	.3078	-.0000	-.0000	-9.9942
13						
14						
15						
16						
17						
18						
1	-.0252	.0275	.0003	-.0244	.0134	-.0138
2	.0009	.0000	.0195	-.0020	.0000	.0215
3	.5033	-.C840	-.CCC1	.6430	-.1119	-.0280
4	.0000	.0000	.0001	-.0000	-.0000	-.0002
5	-.0000	.0000	-.0000	-.0000	.0000	-.0001
6	.0169	.0005	.0000	.0238	.0004	.0000
7	.0465	.0164	2.1659	.0434	.0172	2.8786
8	.0022	-.0001	-.0364	-.0023	-.0001	-.0499
9	-.1.7053	.4471	-.0119	-2.2644	.5869	.0121
10	-.0000	.0000	.1450	-.0000	.0000	.1946
11	.0001	.0000	-.0012	.0001	-.0016	-.0000
12	-.1245	.0321	.0000	-.1663	.0428	-.0024
13			-.0015			

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Table II - 3b. (Continued)

	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
1	.0408		-.0138		-.0141														
2	-.0605		.0215																
3	-.0557		-.0280																
4	-.0002		.0002																
5	-.0002		.0004																
6	.0000		.0000																
7	.4199		.6692																
8	.0421		-.0517																
9	-.0026		-.0000																
10	.0275		.0015		-.0000														
11	.0056		-.0059		.0000														
12	.0000		-.0000		.0000														
13	.0173		-.0178		.0000														
1	-1.1253		.0306		-.0096														
2	1.0038		5.2798		-.0233														
3	-.1691		-.1214		-1.6856														
4	-.1043		.0218		.0002														
5	-.0310		.0249		-.0024														
6	.0000		.0000		-.2986														
7	-.10.1696		2.2680		-.0182														
8	-.8454		-3.6830		-.0133														
9	-.0213		.0125		-1C.8736														
10	-.5516		.1180		.0001														
11	-.1269		-.4226		-.0025														
12	-.0000		.0000		-.7556														
13	-.4359		-1.2656		-.01C3														
1	2.6257		-.0309		-.1574														
2	-.1163		-.1109		2.7965														
3	-.0699		2.6861		.0057														
4	-.0030		.0000		-.0110														
5	-.0008		-.0002																
6	.0000		-.0031																
7	2.5835		-.0069		-.0875														
8	-.1613		-.0561		2.8033														
9	-.0134		2.6665		.0092														
10	-.0029		.0000		-.0110														
11	-.0009		.0000																
12	-.0000		-.0032																
13	.0190		-.0083																

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Table II - 3b. (Continued)

	37	38	39
1	.0473	-.0003	-.0002
2	-3.0112	-.0255	-.0126
3	-.0239	.0002	.001
4	.0054	.0000	-.0000
5	-.0127	-.0002	-.0001
6	.0000	-.0000	.0000
7	.0842	-.0004	-.0001
8	-.3022	-.0265	-.0049
9	-.0427	-.0002	.0000
10	.0054	.0000	-.0000
11	-.0128	-.0003	-.0001
12	-.0000	-.0000	-.0000
13	-.0390	-1.7988	-2.0088

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Table II - 4a. Trajectory No. 4 (Positive Perturbations)

1	10500.2167	181.6588	2.4545	228.1745	5.8760	-1.0985	
2	-367.2616	10303.9917	1.8198	-8.3546	296.2501	-1.441	
3	.0286	-.0411	16494.9207	.0330	-.0272	357.4511	
4	*3251	-9.0964	*0.76	*0.687	-.0417	-.1375	
5	-6.2159	-.0524	*0.514	-.2085	-.1587	-1926	
6	.00C8	.0021	-.2834	.0013	.0028	9.8321	
7	-4.5059	-139.2078	2.3481	-131.7028	-5.1518	-1.2461	
8	-45.1943	-186.3527	1.8880	2.7120	-63.5493	-1275	
9	.0196	.0365	-.1770	.0140	.0169	-2.5441	
10	-.2249	-9.1009	*0.071	-9.9360	-.3473	-1075	
11	-6.2122	.2214	*0.514	.0971	-10.1497	-1925	
12	.0011	.0022	-.0094	.0013	.0029	-1.932	
13	-18.9744	-.9897	*.3306	*.5741	-31.3017	-7596	
			10	11	12		
			9	8	7		
			14	15	16	17	18
			.0042	.0056	-.0445	*.0042	-.0037
1	10505.0767	320.8855	.0000	359.9781	10.9914	-.2119	
2	-321.0403	10490.1475	.0273	-11.0122	359.7808	-.3054	
3	-.0086	-.0203	10495.0186	-.0027	.0030	359.9439	
4	.5541	.0044	.00C5	10.0048	*.3058	.00C6	
5	-.0037	-.2761	-.0001	-.3056	9.9906	*.3056	
6	-.00C2	-.0001	-.2763	-.0000	.0000	9.9953	
7	-.00C1	.0001	.0000	.0000	*.0000		
8	*.0336	*.0122	*.1043	*.0124	*.0159	-1369	
9	1.80C7	-.5693	.0022	2.4185	-.7640	-1954	
10	.00C1	-.0000	-.1460	.0002	-.0000	-0058	
11	:0001	-.0000	*.0042	*.0002	*.0000	-0002	
12	.1419	-.0345	.0062	.1900	-.0462	*.0002	
13							

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Table II - 4a. (Continued)

	19	20	21	22	23	24	
1	-.0908	-.0007					-.0100
2	.1047	-.0033					-.0211
3	-.0237	-.0070					-.0000
4	.0002	-.0003					
5	-.0004	-.0004					-.0000
6	-.0000	-.0000					-.0001
7	-.3503	-.0447					-.0300
8	-.0290	.0557					
9	.0040	-.0048					.0115
10	-.0276	-.0016					.3620
11	-.0055	.0662					.0055
12	.0000	.0000					-.0000
13	-.0186	.0186					.0283
	25	26	27	28	29	30	
1	1.0890	.8057	-.0052				-.0404
2	-.8451	-.5112	.1670				-.1039
3	-.0172	-.0199	.7589				-.0162
4	.C989	-.0235	.0000				-.0005
5	-.0289	-.0334	-.0066				-.0014
6	-.0001	.0000	.0000				-.0000
7	8.9784	-2.0991	-.0577				-.0628
8	.5096	2.8860	.0339				.1796
9	-.0036	-.0176	.9.2833				-.0011
10	.5473	-.1194	.0005				-.0064
11	.1244	.4146	-.0003				.0261
12	-.0006	.0002	.5603				-.0000
13	.4579	1.2325	-.0044				.0054
	31	32	33	34	35	36	
1	-2.6058	.0309	-.0308				-.0059
2	.4123	.1109	-.2.1092				-2.4358
3	-.0156	-2.6861	-.0168				-.0203
4	.0028	-.0000	.0046				-.0037
5	.0013	.0002	-.3255				-.0401
6	-.0000	.0031	-.0000				-.0000
7	-2.6882	.0069	.0184				-.1355
8	.3780	.0561	-2.1382				-2.4839
9	-.0085	-2.6665	-.0105				.0135
10	.0027	-.0000	.0046				-.0037
11	.0012	.0000	-.3256				-.0403
12	.0000	.0032	-.0000				-.0001
13	-.0366	-.0083	-.9836				-.1120
				74.2937			
				-.0989			

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Table II - 4a. (Continued)

	37	38	39
1	.0261		
2	3.0200		
3	-.0035		
4	-.0052		.0002
5	.0146		.0005
6	-.0001		-.0003
7	.0269		
8	3.0239		
9	-.0046		
10	-.0052		
11	.0143		
12	.0000		
13	.0440	1.8000	2.0310

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Table II - 4b. Trajectory No. 4 (Negative Perturbations)

	1	2	3	4	5	6
1	-10502.5948	-206.4214	3.0438	-223.0656	-3.4705	.1367
2	357.5583	-10300.6689	-1.5148	6.4861	-288.2172	-.1310
3	.0149	.0143	-10495.1472	-.0122	-.0018	-357.5346
4	-.3873	8.9004	.1079	-.6375	.0315	.0975
5	6.6193	.0461	-.2313	.5099	-.0628	.1285
6	.0008	.0019	.2683	.0013	.0025	-.8210
7	2.2481	114.2365	2.9337	136.7936	7.4215	.2180
8	36.5483	189.4214	-1.5392	-4.5546	71.4714	-.1792
9	.0075	.0266	-.0511	.0073	.0187	2.4116
10	.1600	.9044	.1075	9.9672	.3372	.0975
11	6.6148	-.2286	-.2311	.2045	9.9276	.1287
12	.0010	.0020	-.0062	.0013	.0026	.1743
13	19.8244	-.7787	-.5365	2.7015	29.4081	.5826
	7	8	9	10	11	12
	1	2	3	4	5	6
	7	8	9	10	11	12
	13					
	13					
	1	2	3	4	5	6
	7	8	9	10	11	12
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	13					
	13					
	1	2	3	4	5	6
	7	8	9	10	11	12
	13					
	13					
	1	2	3	4	5	6
	7	8	9	10	11	12
	13					
	13					
	1	2	3	4	5	6
	7	8	9			

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Table II - 4b. (Continued)

	19	20	21	22	23	24	
1	-.0474	-.0908		-.0013		-.0049	
2	.0423	.1047		-.0067		.0077	
3	-.0329	-.0237		-.0141		.0837	
4	-.0003	.0002		.0000		-.0000	
5	-.0005	.0004		-.0000		-.0000	
6	.0000	.0000		-.0000		.0034	
7	.3510	-.0130		-.0049		-.0334	
8	.0324	-.0324		.0077		.0160	
9	.0031	-.0007		.0837		-.2909	
10	.0275	.0016		.0000		-.0000	
11	.0055	-.0062		-.0000		-.0000	
12	-.0000	.0000		-.0070		-.0249	
13	.0186	-.0186					
	25	26	27	28	29	30	
1	-.2219	.4265	-.0757	-.0461		.0443	
2	1.4742	5.5878	.0757	.0490		.2726	
3	.0017	-.1033	-1.0235	-.0189		-.0209	
4	-.0989	.0234	-.0001	-.0005		.0004	
5	-.0292	.0307	-.0031	-.0000		.0015	
6	.0004	-.0001	-.2974	-.0000		-.0000	
7	-9.1505	2.0991	-.0935	-.1278		.0628	
8	-.4293	-2.8860	.0535	.0175		-.1796	
9	.0011	.0176	-.9.4674	-.0047		.0011	
10	-.5474	.1192	-.0005	-.0072		.0064	
11	-.1251	-.4180	-.0032	-.0016		-.0264	
12	.0008	-.0001	-.7558	-.0000		.0000	
13	-.4660	-1.2428	-.0133	-.0054		-.0791	
	31	32	33	34	35	36	
1	2.7441	-.0309	-.1106	.01530		.0663	
2	-.0796	-.1109	2.2363	-.1.6420		11.9815	
3	-.0257	2.6861	-.0272	-.0334		.0081	
4	-.0030	.0000	-.0046	-.0005		-.0166	
5	-.0010	-.0002	-.3256	-.0128		.0355	
6	.0000	-.0031	.0000	-.0000		-.0000	
7	2.6818	-.0069	-.0639	-.0234		.1042	
8	-.2283	-.0561	2.19C6	-.1.7375		12.0728	
9	-.0012	2.6665	-.0013	-.0059		.0039	
10	-.0029	.0000	-.0046	-.0005		-.0169	
11	-.0009	.0000	-.3255	-.0129		.0355	
12	-.0000	-.0032	.0000	-.0000		.0001	
13	.0023	.0083	.9836	-.74.2983		.1049	

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Table II - 4b. (Continued)

	37	38	39
1	.1023		
2	-2.9754		
3	-.0300		
4	.0051		
5	-.0169		
6	-.0000		
7	-.1211		-.0010
8	-2.9859		-.0051
9	-.0136		-.0108
10	.0051		.0002
11	-.0171		-.0005
12	.0001		.0003
13	-.0520		-.1.8000
			-2.0310

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Table II - 5a. Trajectory No. 5 (Positive Perturbations)

	1	2	3	4	5	6
1	10493.0391	193.1801	1.7553	223.1390	9.0351	.6737
2	-371.4457	10289.7875	-2.5460	-.8762	288.8446	-.5102
3	-.0628	.0301	10495.0922	-.0517	.0569	357.4978
4	.6431	-.8.9100	.0061	.2120	-.0744	.0115
5	-7.5070	-.7409	-.0361	-.1380	.0602	.0142
6	-.0018	.0012	-.2692	-.0020	.0012	9.8231
7	-11.7777	-127.3514	1.6973	-136.6083	-.2.0839	.8633
8	-50.4512	-200.4898	-2.3678	10.2210	-.71.0114	-.4830
9	-.0290	-.0217	.0174	-.0239	-.0058	-2.4921
10	.0946	-.8.9140	.0054	-.7930	-.3800	.0115
11	-7.5028	-.4676	-.0360	.1680	-.9.9305	.0145
12	-.0017	.0010	.0045	-.0019	.0012	-.1752
13	-23.4435	-2.1806	-.0270	-1.3471	-.30.1362	.1827
	7	8	9	10	11	12
1	10505.0654	320.7443	.0265	359.9630	11.0195	.0266
2	-320.8896	10495.1699	-.0016	-10.9901	359.7781	.0183
3	-.0156	.0040	.0495.0391	-.0048	-.0087	359.9381
4	.5523	.0037	.0065	10.0048	.3056	.0036
5	-.0042	-.2752	.0002	-.3055	9.9906	-.0000
6	-.0001	.0002	-.2758	-.0000	.0000	.9.9953
	13	14	15	16	17	18
1	.0177	.0023	-.0468	.0362	.0108	-.3468
2	.0019	-.0065	-.0414	-.0113	-.0174	-.0414
3	-.4749	-.0839	-.0019	-.5424	.1119	-.0019
4	.0001	.0000	-.0001	-.0001	-.0000	.0003
5	-.0001	.0000	-.0001	-.0001	-.0000	.0001
6	-.0191	.0005	.0000	-.0266	.0009	.0000
7	.0065	.0115	-.1.8961	.0119	.0154	-2.5160
8	.0194	.0063	.0680	-.0086	.0084	.1077
9	1.4686	-.4191	-.0092	1.9437	-.5587	.0024
10	-.0001	.0001	-.1450	-.0002	.0001	-.1940
11	.0001	-.0000	.0047	.0001	-.0000	.0062
12	-.1216	-.0340	-.0001	.1621	-.0454	-.0001
13				.0024		.0027

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Table II - 5a. (Continued)

	19	20	21	22	23	24
-1	-.0888	-.0426		.0042		-.0066
2	.0055	-.0458		-.0054		.0119
3	.0116	.0121		.0140		-.3979
4	.0003	-.0002		.0000		-.0000
5	.0000	-.0001		-.0000		-.0000
6	.0000	-.0000		.0001		-.0038
7	-.3686	-.0231		-.0023		-.0034
8	-.0553	.0262		.0065		-.0096
9	.0030	-.0002		-.0839		.2934
10	-.0274	-.0017		.0000		-.0000
11	-.0055	.0068		-.0000		.0000
12	-.0000	.0000		-.0068		.0243
13	-.0188	.0265				
	25	26	27	28	29	30
1	.5423	-.6483	-.0859	-.0657	.0032	
2	-1.18C5	-5.2422	.0468	-.0206	-.1929	
3	-.0449	-.0541	1.0946	.0119	.0112	
4	.1287	-.0285	.0000	.0006	-.0002	
5	.0183	-.0079	-.0010	.0000	-.0002	
6	.00C2	-.0000	.3020	.0000	.0000	
7	9.4044	-2.0886	.0729	.0888	-.0920	
8	.4658	3.2163	.0422	-.0055	.1984	
9	.0125	-.0093	9.6585	-.0116	.0064	
10	.5757	-.1246	-.0006	.0072	-.0062	
11	-.1147	.4396	-.3004	.0018	.0277	
12	.00C7	-.0001	.7592	.0000	-.0000	
13	.4255	1.3090	-.0044	.0061	.0833	
	31	32	33	34	35	36
1	-3.2272	.0309	.1406	-.1768	-.2474	-.1200
2	.3459	.1109	-2.1419	1.7092	-.9729	-2.2193
3	.0143	-2.6861	.0138	.0207	-.0113	-.0231
4	.0038	.0000	.0023	-.0014	.0155	-.0621
5	.0001	.0002	-.3256	.0016	-.0035	-.0052
6	.0000	.0031	-.0000	-.0000	-.0000	-.0000
7	-3.0266	.0069	.0422	.0240	-.0373	-.0488
8	.4024	.0561	-2.3135	1.6720	-.8358	-2.2699
9	-.0073	-2.6665	-.0055	-.0023	.0134	-.0075
10	.0037	.0000	.0023	-.0015	.0154	-.0022
11	.0005	.0000	-.3256	.0019	-.032	-.0050
12	-.0000	.0032	-.6000	.0000	-.0000	-.0000
13	-.0447	-.0083	-.9834	74.2710	-.0073	-.0154

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Table II - 5a. (Continued)

	37	38	39
1	-.1253	-.1292	-.0674
2	2.7845	-.0364	-.0149
3	-.0276	.0688	-.0016
4	-.0069	.0000	.0001
5	.0022	.0001	.0002
6	.0000	.0000	-.0000
7	.0257	-.0042	
8	2.9009	.0054	
9	.0044	-.0138	
10	.0010	.0000	1.7789
11	.0026	.0002	1.5734
12	.0000	.0000	.0724
13	.0033	1.7280	1.9698

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Table II - 5b. Trajectory No. 5 (Negative Perturbations)

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Table II - 5b. (Continued)

	19	20	21	22	23	24	
1	-.0237	-.0888		.0147		-.0123	
2	-.0676	.0055		-.0153		.0088	
3	-.0017	.0116		-.0278		.1117	
4	-.0001	.0002		.0000		.0001	
5	-.0001	-.0000		-.0000		-.0001	
6	-.0000	-.0000		-.0001		.0038	
7	.3686	.0463		.0023		.0034	
8	.0553	-.0524		-.0065		.0096	
9	-.0030	.0035		.0839		-.2934	
10	.9273	.0016		.0000		.0000	
11	.0061	-.0065		-.0000		-.0000	
12	.0000	.0000		.0068		-.0243	
13	.9225	.0195					
	25	26	27	28	29	30	
1	-.2118	-.4760	.0987	-.0042	-.0263		
2	1.3748	5.0919	-.0632	.0054	.2191		
3	-.6971	.0209	-1.0524	-.0140	-.0114		
4	-.1281	.0286	.0003	-.0005	.0003		
5	-.0176	.0085	-.0012	-.0001	.0002		
6	-.0002	.0000	-.3020	-.0000	-.0000		
7	-.4044	2.0386	.1252	-.0886	.0920		
8	-.4658	-.3.2163	.0201	.0055	-.1984		
9	-.0125	.0093	-.6943	-.0116	-.0004		
10	-.5757	.1243	.0005	-.0073	.0062		
11	-.1127	-.4380	-.0005	-.0013	-.0276		
12	-.0006	.0002	-.7561	-.0000	-.0090		
13	-.4241	-.1.3039	-.0044	-.0044	-.0898		
	31	32	33	34	35	36	
1	2.7947	-.0309	.0939	-.0940	-.0676	-.1823	
2	-.2344	-.1109	2.4425	-.1.6872	8.8542	2.1846	
3	.0034	2.6861	-.0028	-.0001	-.0061	.0008	
4	-.0038	.0000	-.0022	.0014	-.0155	.0021	
5	-.0003	-.0002	.3255	-.0016	.0031	.0047	
6	-.0000	-.0031	-.0000	-.0000	-.0000	-.0001	
7	3.0697	-.0069	-.0233	-.0240	.0802	-.1425	
8	-.2619	-.0561	2.2922	-.1.6720	8.8776	2.4284	
9	-.0034	2.6665	-.0083	-.0023	-.0102	-.0392	
10	-.0039	.0000	-.0022	.0014	-.0154	.0021	
11	.0006	-.0000	.3255	-.0013	.0032	.0049	
12	-.0000	-.0032	.0000	-.0009	.0009	.0000	
13	.6276	-.0083	.9836	-.74.2690	.0081	.0151	

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Table II - 5b. (Continued)

	37	38	39	
1	-.1133	-.0747	-.0647	
2	-2.9833	-.0661	-.0203	
3	.0015	-.0030	.0117	
4	.0069	.0000	-.0000	
5	-.0020	.0000	-.0000	
6	.0000	-.0000	-.0000	
7	-.0262	.0194		
8	-2.9003	-.0213		
9	-.0040	-.0141		
10	.0069	.0000	-.0000	
11	-.0019	.0003	.0001	
12	-.0000	-.0001	.0000	
13	-.0061	-1.7970	-2.0077	

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TABLE III  
3 SIGMA DIFFERENCES FOR CSM  
TRANSEARTH INJECTION PHASE

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Table III - 1a. Trajectory 1 (Positive Perturbations)

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Table III - la. (Continued)

	19	20	21	22	23	24
1	-1.1663	.2000	-.1426	-.1876	-.1105	-.2602
2	.0379	-.1512	.C1C4	.0588	.0592	.0593
3	-.0397	.0429	.0073	-.4715	.0296	-.0180
4	.0001	.0032	.0001	.0002	.0002	.0003
5	-.0004	-.0027	-.0003	-.0003	-.0002	-.0006
6	.0000	.0001	.0000	-.0006	.0000	.0001
7	.0332	-.57.7731	.C1E0	1.2622	-.0572	.0632
8	-.9634	5.9654	.0244	7.5943	-.0872	-.0184
9	.0032	.2930	.0112	57.4834	.0103	.1243
10	-.0002	-.3697	.0004	.0186	-.0010	.0004
11	-.0026	.1071	.E012	.1140	.0000	.0000
12	.0003	.0043	-.0002	.8631	.0001	.0023
13	.0056	-.0042	-.0027	.0024	.0002	.0005
	25	26	27	28	29	30
1	8.1963	.8560	-.0638	3.6814	.0030	-.0492
2	101.7922	-.2926	.C1C7	42.3353	.0047	.0390
3	-15.1825	.0166	.9437	-.6.3560	.0146	-.0144
4	-.0555	-.0006	.0001	-.0231	-.0000	-.0000
5	.0051	-.0005	-.0001	.0028	.0000	.0000
6	-.0190	.0030	.0025	-.0081	-.0000	.0000
7	-.3.5760	-137.1563	-.2.9452	-.3.6367	.1396	.0040
8	-34.6223	16.7688	-.18.1988	-.15.1212	-.0151	.0056
9	3.1900	.7062	-136.4953	1.4299	.0073	.0695
10	-.2967	-.1.9902	-.C422	-.1295	.0023	.0000
11	-1.9536	.2425	-.2613	-.8534	-.0002	.0001
12	.2451	.0097	-1.9743	.1074	-.0001	.0012
13	4.2729	-.0116	-.C071	1.8665	.0002	
	31	32	33	34	35	36
1	-56.8815	.3630	2.C859	-.67.5433	-378.7171	12.4529
2	2.6219	2.8870	17.0930	-.811.9863	635.4209	152.4665
3	1.2449	62.6760	-2.3713	120.8210	-547.0434	-22.7342
4	.0129	-.0015	.1151	.4189	-.8934	-.0947
5	.0340	-.0008	.9621	-.2520	-.9732	-.0767
6	.0016	.0749	-.1318	.1792	-.1179	-.0171
7	-57.0169	.4584	2.6798	-.67.1073	-378.6574	12.4546
8	2.5399	2.8025	17.0836	-.812.1193	635.3887	152.4577
9	1.2569	62.9864	-2.3421	120.8349	-547.0414	-22.7350
10	.0128	-.0015	.1150	.4188	-.8935	-.0947
11	.0361	-.0003	.9621	-.2521	-.9730	-.0767
12	.0015	.0749	-.1318	.1791	-.1179	-.0171
13	-.1733	-.0906	-2.C991	112.9158	64.0212	.1690

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Table III - la. (Continued)

	37	38
1	7 • 1967	.1754
2	85 • 9171	3 • 5746
3	-12 • 7408	-.5376
4	-.0471	-.0018
5	.0025	.0003
6	-.0156	-.0007
7	7 • 1672	-.2873
8	85 • 9649	-1 • 3501
9	-12 • 7315	.1255
10	-.0472	-.0111
11	.0024	-.0747
12	-.0156	.0034
13	-.0066	.1633

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Table III - 1b. Trajectory No. 1 (Negative Perturbations)

	1	2	3	4	5	6
1	-5887.1240	-887.9358	35.6753	-921.4323	-160.3093	15.5117
2	.923.0849	-9157.3400	638.8762	155.9536	-1711.7507	215.1958
3	46.1221	.7549	-6538.4601	6.0026	41.5505	-1046.9215
4	.9591	5.1412	-.3617	-.1424	.9629	-.1230
5	3.1773	.1563	-.0256	.4806	.0595	-.0280
6	.0586	.0060	-7.80CC	.0100	.0455	-1.2469
7	126.1562	-41.0851	.8825	1916.9272	115.5239	2.9038
8	74.4821	-3280.4526	2C1.0C58	-.119.8235	209.2632	72.4281
9	22.2692	439.5946	-591.3182	-1.7239	184.7923	893.7274
10	2.0918	5.1723	-.3621	15.1757	3.0926	-.2205
11	3.1284	-.4067	.0161	-.1.6415	14.7761	-1.1225
12	.0583	-.0353	-8.3633	-.0496	1.1427	13.6203
13	-7.1156	-.1093	-2.3958	-.4470	-31.6022	6.3014
1					11	12
2						
3						
4						
5						
6						
7	-6013.6560	-846.6439	38.7752	-1938.3896	-275.5707	12.6342
8	853.67C2	-.5386.5501	437.709C	275.8874	-1921.0991	142.8268
9	23.8860	-438.7855	-5946.8065	7.7467	-143.1965	-1946.7098
10	-1.138C	-.0300	.00C3	-15.0336	-2.1295	.0974
11	.0498	.5658	-.C419	2.1211	-14.7167	1.0943
12	-.0003	.0417	.5660	.0594	-1.0970	-14.8672
13						
1					15	16
2					14	17
3					13	18
4					12	
5					11	
6					10	
7					9	
8					8	
9					7	
10					6	
11					5	
12					4	
13					3	
					2	
					1	

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Table III - 1b. (Continued)

		20	21	22	23	24
1	-1.1285	-.5324	-.1266	-.0625	-.0411	-.6170
2	-.5320	.5978	.0348	.0155	-.0628	-.1865
3	.0146	.0224	.0195	.4939	.0215	.1076
4	.0001	.0002	.0001	.0001	.0002	.0032
5	-.0004	-.0002	-.0003	-.0002	-.0001	-.0057
6	.0001	.0000	.0001	.0006	-.0001	.0011
7	.0191	.577632	.0362	-.1.2259	.0664	.4128
8	.291	-.7.2054	-.0587	-.7.6530	-.1267	-.5022
9	-.0934	-.2768	-.0114	-.57.4947	.0064	-.1.2470
10	.0005	.8701	-.0000	-.0183	.0014	.0028
11	.0022	-.1677	-.0012	-.1142	-.0003	-.0056
12	-.0003	-.0042	-.0001	-.8632	-.0001	-.0225
13	-.6049	.0049	.0027	-.0027	.0005	.0049
			29		30	
1	-3.1310	-.3590	.0447	-.3.1651	.0130	.0197
2	-101.8068	.2829	-.0328	-.42.4595		.0258
3	15.2080	-.0020	-.9403	6.3225		-.0000
4	.0579	.0008	.0002	.0241		-.0000
5	.0553	.0002	.0001	.0026		.0000
6	.0177	.0000	-.0004	.0073		.0483
7	1.7045	1.271.1674	2.9593	3.6778		-.0399
8	24.7.143	-.16.3602	12.1.064	15.1.841	-.0192	-.0698
9	-3.2040	-.6849	136.5020	-.1.4514	-.0075	-.0001
10	.3011	1.9913	.0425	.1304	-.0022	-.0001
11	1.9667	-.2462	.2611	.8596	.0025	-.0012
12	-.2471	-.0096	1.9743	-.1084	-.0000	
13	-4.3010	.0093	.0042	-.1.8799	-.0002	
			28		31	
1	32	33	34	35	36	
2	-13.2052	-17.2057	-2.01C4	66.0175	-116.0886	-.129.5746
3	-61.1665	2.3339	807.7210	-1423.5995	-1569.5514	
4	.0077	-.1149	-.4495	.0441	.0401	
5	.0002	-.5626	-.CC44			
6	-.0730	.1313	-.1443	.2495	.2760	
7	-1.4267	-.0466	.66.4012	-116.4433	-129.6238	
8	-13.2877	17.1470	807.6222	-1423.4567	-1569.5123	
9	-61.5219	2.3453	807.3188	212.2108	233.5616	
10	.0075	-.1149	-.4495	.7967	.8776	
11	.0002	-.5626	-.0045	.0442	.0402	
12	-.0002	1.3118	-.1443	.2495	.2758	
13	-.0496	-.1311	-.0731	-.112.3535	-.63.0815	-.1067

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Table III - 1b. (Continued)

	37	38
1	-7.1012	-1533
2	-85.9590	-35409
3	12.7616	.5196
4	.0485	.0019
5	.0032	.0002
6	.0151	.0006
7	-7.1248	.3396
8	-85.9949	1.3158
9	12.7317	-1258
10	.0485	.0113
11	.0033	.0755
12	.0149	-.0096
13	-.0060	-.1650

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Table III - 2a. Trajectory No. 2 (Positive Perturbations)

1	5884.6839	687.1937	-1.7401	914.6372	111.3211	6	-4358
2	-929.4214	9161.7944	-52.6539	-205.3040	1731.9701		-19.6419
3	-4.5138	-1.2521	6560.6380	.3884	-3.3223	1027.1211	
4	-3.9977	-5.1536	.0230	.1066	-.9711	.0102	
5	-3.2220	-2.2237	-.0023	.5043	-.0484	-.0055	
6	-.0034	.0021	8.3064	.0006	-.0039	1.2995	
7	-127.8456	-163.6302	1.6211	-1023.5687	-165.5754	.8170	
8	-72.2863	3259.4099	-15.3977	71.6059	-194.0850	-7.4928	
9	-2.4969	-38.6595	597.4583	1.0164	-15.4802	-918.8359	
10	-2.0319	-5.1839	.0223	-.15.1394	-.3.1107	.0187	
11	-3.1711	.3429	-.0059	1.6254	-14.8038	.0879	
12	-.0032	.0059	8.8726	.0055	-.0974	-13.6076	
13	7.2262	-.4422	.2153	-1.7427	32.9461	-.5935	
1	7	8	9	10	11	12	
1							
2							
3							
4							
5							
6	6913.1069	850.5791	-3.2738	1938.3050	276.8559	-1.0958	
7	-857.2136	5962.1790	-37.4077	-277.0573	1926.2224	-12.2024	
8	-2.0261	37.4598	5962.6329	-.6634	1.2.2307	1945.9431	
9	1.1376	.9352	.0010	15.0329	2.1397	-.0084	
10	-.0515	-.5689	.0034	-2.1298	14.7555	-.0935	
11	-.0000	-.0037	-.5690	-.0050	.0937	14.9072	
12							
13							
13	14	15	16	17	18		
1	-.0685	-.0891	-11.9782	-.0685	-.1159	2952	
2	.0115	.0142	1.4134	.0115	.0354	-.0033	
3	-.0138	-.2066	-.4497	-.0138	-.5537	.0042	
4	.0001	.0000	-.0044	-.0000	.0000	.0005	
5	.0001	.0001	.0028	.0000	.0000	-.0004	
6	.0000	-.0002	.0005	.0000	-.0013	.0000	
7	-.0683	.7011	-384.3198	-.0543	.6952	<401.3506	
8	-.0001	4.0011	20.5960	.0137	4.1744	22.3919	
9	-.6939	385.1213	.0482	.7400	400.8277	*4788	
10	-.0007	.0103	-.5.7078	-.0008	.0109	-6.0304	
11	.0003	.0599	.3057	.0001	.0630	.3330	
12	.0133	5.6843	.0066	.0142	6.0032	.0073	
13	-.0002	-.0002	.0422	.0002	-.0002	.0002	

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Table III - 2a. (Continued)

	19	20	21	22	23	24
1	- .2098	.0171	- .1574	- .1549	.0359	.1538
2	- .1013	-.0920	- .2536	- .2435	- .0581	.0019
3	* .0198	.0064	* .0189	- .0147	- .0148	.0363
4	* .0001	.0002	* .0004	* .0003	* .0003	.0003
5	* .0000	- .0002	- .0000	- .0001	- .0001	.0001
6	* .0000	* .0000	* .0001	* .0000	* .0000	.0001
7	* .0008	- .3518	- .58 .1501	* .0184	* .0977	.0103
8	- .3518	3 .3206	- .3235	* .3385	* .0022	- .1199
9	- .0031	* .0636	- .0056	* .58 .1011	- .0075	.0997
10	* .0000	- .8613	* .0004	* .0019	* .0002	.0003
11	- .0020	* .0504	* .0003	* .0097	* .0000	- .0000
12	* .0000	* .0010	* .0000	* .8576	- .0000	.0020
13	* .0044	- .0044	- .0007	* .0002		
	25	26	27	28	29	30
1	1 .5265	- .1744	- .0543	* .6231	- .0863	- .0167
2	105 .0142	- .1616	- .0484	* .42 .7090	- .0179	- .0249
3	- 1 .3029	* .0125	- .2065	* .5190	- .0076	- .0087
4	- .0568	- .0004	- .0000	- .0233	* .0000	- .0000
5	* .0071	* .0001	* .0001	* .0035	* .0001	* .0000
6	- .0017	* .0000	- .0008	- .0007	* .0000	* .0000
7	- 6 .4742	- 141 .2122	- .2789	- 2 .6401	* .1225	- .0003
8	- 35 .8071	8 .0782	- 1 .6655	- 15 .4176	* .0391	- .0011
9	* .2663	* .1605	- 141 .0902	* .1095	- .0109	.0037
10	- .1746	- 2 .0149	- .0037	- .0737	* .0020	* .0000
11	- 1 .9933	* .1182	- .0226	- .8519	- .0000	* .0000
12	* .0212	* .0024	- 2 .0058	* .0091	* .0000	* .0001
13	4 .4009	- .0115	- .0027	1 .8806		
	31	32	33	34	35	36
1	- 3 .9125	- .0304	* .9392	- 14 .6922	* .9698	27 .3752
2	- 3 .0519	- 3 .0737	17 .3277	- 794 .6092	1407 .5527	1546 .6217
3	* .0970	4 .2769	- .1889	10 .2040	- 18 .0427	- 19 .7735
4	* .0025	* .0018	* .0525	* .4384	- .7692	- .8455
5	* .0017	- .0002	* .9527	* .0220	* .0648	* .0673
6	* .0001	* .0054	- .0111	* .0125	* .0234	* .0256
7	- 4 .1337	- .1196	* .9582	- 14 .4791	* .24 .1787	* .27 .6204
8	- 3 .2750	- 3 .1471	17 .2436	- 794 .8497	1407 .5314	1546 .5435
9	* .0387	4 .5468	- .2086	10 .1476	- 18 .0461	- 19 .7954
10	* .0025	* .0017	* .0525	* .4384	- .7691	- .8455
11	* .0018	- .0004	* .9526	* .0218	* .0650	* .0672
12	* .0001	* .0054	- .0111	* .0125	- .0234	* .0256
13	- .0735	- .0686	- 2 .0989	112 .8452	62 .2792	- .1712

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Table III - 2a. (Continued)

	37	38
1	1.4497	.0149
2	85.8549	3.4520
3	-1.0626	-.0487
4	-.0468	-.0019
5	.0037	.0005
6	-.0014	-.0001
7	1.6369	-.2242
8	85.8679	-1.3009
9	-1.0919	.0071
10	-.0468	-.0062
11	.0039	-.0728
12	-.0014	.0008
13	-.0120	.1606

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Table III - 2b. Trajectory No. 2 (Negative Perturbations)

	1	2	3	4	5	6
1	-5880.8372	-677.6309	2.8806	-710.0549	-108.7351	.9090
2	932.3179	-9163.5306	55.2680	203.8621	-1723.6958	17.8208
3	-3.5473	-1.4121	-6567.1545	-.0815	4.4247	-1024.1517
4	.8916	5.1468	-.0365	.1062	.9616	-.0100
5	3.2315	.1071	.0061	.5038	-.0205	.0026
6	-.0068	.0021	-.8.3017	.0001	.0062	1.2955
7	131.6629	173.1293	-.5826	1027.9897	167.7842	-.3143
8	75.4376	-3261.1658	17.9879	-72.9502	202.5310	5.7195
9	-1.5345	-36.0438	-.603.9448	-.5695	16.6528	921.7960
10	2.0263	5.1780	-.0371	15.1389	3.1011	-.0185
11	3.1823	-.4586	.0101	-.1.6260	14.7348	-.0907
12	-.0069	-.0013	-.8.8678	-.0049	-.1000	13.6117
13	-7.2356	.7394	-.2703	1.6525	-32.6837	.4986
			10	11	12	
1			7	8	9	
2						
3						
4						
5						
6						
7	-6013.2883	-.850.5878	3.3993	-1938.3117	-276.8706	1.0915
8	857.1550	-5902.2193	37.3555	277.0479	-1926.2448	12.1966
9	-1.9294	-37.4725	-.5962.8566	-.6565	-12.2357	-1945.9487
10	-1.1400	-.0303	.0006	-15.0330	-2.1396	.0084
11	.0479	.5683	-.0037	2.1297	-14.7555	.0934
12	-.0004	.0034	-.5688	-.0050	.0937	-14.9072
13						
			14	15	16	17
1	-.0011	-.0504	-.2954	-.0011	-.0223	-.6605
2	-.0045	-.0012	.0022	-.0045	-.0168	.0115
3	-.0149	.2126	-.0004	.0149	.5441	.0003
4	.0000	.0001	-.0000	-.0000	.0001	-.0005
5	.0000	.0001	.0002	-.0000	.0001	.0003
6	.0000	.0093	.0000	.0000	.0013	.0000
7	.0516	-.7520	385.5842	.0546	-.7811	401.2817
8	-.0248	-4.7896	-22.3372	-.0125	-5.0196	-23.2110
9	-.7026	-.385.1179	-.4546	.7437	-.400.8212	.4675
10	-.0008	-.0110	5.7098	.0009	-.0115	6.0298
11	-.0002	-.0711	-.3270	-.0000	-.0755	-.3454
12	-.0132	-.6842	-.0068	-.0141	-.0030	-.0072
13			-.0007	-.0002		-.0010

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Table III - 2b. (Continued)

	19	20	21	22	23	24
1	-1.1225	.0504	-.1044	-.1236	.0357	1.5604
2	-.3161	.0760	-.2856	-.3206	-.0592	-1.0721
3	.0191	.0223	.0091	.0340	-.0110	.0789
4	.0002	.0001	.0004	.0003	.0003	.0026
5	-.0001	-.0002	-.0000	-.0001	-.0001	.0011
6	.0001	.0001	.0001	.0001	.0000	.0005
7	-.0003	58.2025	.0348	-.1142	.0170	.0745
8	-.2383	-3.3548	-.2997	-.9547	.0261	-.8785
9	.0104	-.0660	.0068	-.58.0988	.0050	-.9933
10	.0004	.8615	.0004	-.0012	.0004	.0035
11	.0020	-.0508	.0001	-.0097	-.0000	-.0001
12	.0000	-.0010	-.0001	-.8576	.0000	-.0196
13	-.0044	.0049		-.0007		
	25	26	27	28	29	30
1	-1.8613	.1915	-.0504	-.8523	.0167	
2	-104.4941	.0696	-.0012	-.42.6093	.0249	
3	1.3524	-.0061	.2126	.5607	.0087	
4	.0573	.0004	.0000	.0230	.0001	.0000
5	-.0083	-.0002	-.0002	-.0032	.0000	.0001
6	.0016	.0000	.0008	.0008	.0000	-.0000
7	6.5260	14.2301	.2442	2.6758	-.1223	.0005
8	36.1258	-.8.1668	.1.6100	15.3584	.0402	.0022
9	-.2643	-.1653	-.141.0915	.1205	.0072	-.0075
10	.1754	2.0148	.0038	.0735	-.0020	.0000
11	1.3947	-.1181	.0229	.8528	.0002	.0000
12	-.0212	-.0023	-.0058	.0001		-.0001
13	-.4.4031	.0081	-.0312	-1.8823		
	31	32	33	34	35	36
1	3.2539	.0172	-.9593	13.9565	-.25.5121	-.29.0366
2	-3.6795	-.3.3323	-.17.2480	795.6710	-.1431.5146	-.1575.9892
3	.0389	-.4.1804	.2235	-.10.3524	-.3189	20.1356
4	.0011	.0018	-.0526	-.4339	.7882	.8676
5	-.0022	-.0003	-.9526	.0518	.0323	.0304
6	.0000	-.0052	.0111	-.0133	.0226	.0249
7	3.8098	-.1005	-.9582	14.3400	-.25.1997	-.29.0021
8	-3.7405	-.3.2298	-.17.2436	795.5753	-.1431.4907	-.1575.9349
9	-.0448	4.4731	-.2086	-.10.1653	-.3243	20.1380
10	.0012	.0019	-.0526	-.4338	.7883	.8678
11	-.0020	-.0003	-.9525	.0519	.0324	.0302
12	-.0001	-.0052	.0111	-.0133	.0227	.0249
13	-.0652	-.0688	2.0991	-113.0076	-63.5751	-.0452

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Table III - 2b. (Continued)

	37	38
1	-1.6124	-.1716
2	-85.8350	-3.4662
3	1.1107	.0535
4	.0470	.0018
5	-.0042	-.0002
6	.0014	.0001
7	-1.6251	.2417
8	-85.8517	1.3292
9	1.0915	-.0096
10	.0471	.0062
11	-.0041	.0735
12	.0014	-.0008
13	.0127	-.1624

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Table III - 2b. (Continued)

	19	20	21	22	23	24
1	-1.1225	.0504	-.1044	-.1236	.0357	1.5604
2	-.3161	.0760	-.2856	-.3206	-.0592	-1.0721
3	.0191	.0223	.0091	.0340	.0110	.0789
4	.0002	.0001	.0004	.0003	.0003	.0026
5	-.0001	-.0002	-.0000	-.0001	-.0001	.0011
6	.0001	.0001	.0001	.0001	.0000	.0005
7	-.0003	58.2025	.0348	-.1142	.0170	.0745
8	-.2383	-3.3548	-.2997	-.9547	.0261	-.8785
9	.0104	-.0660	.0068	58.0988	.0050	.9933
10	.0004	.8615	.0004	-.0012	.0004	.0035
11	.0020	-.0508	.0001	-.0097	-.0000	-.0001
12	.0000	-.0010	-.0001	-.8576	-.0000	-.0196
13	-.0044	.0049		-.0007		
	25	26	27	28	29	30
1	-1.8613	.1915	-.0504	-.8523	.0167	
2	-104.4941	.0696	-.0012	-42.6093	.0249	
3	1.3524	.0061	.2126	.5607	.0087	
4	.0573	.0004	.0000	.0230	.0001	.0000
5	-.0083	-.0002	-.0002	-.0032	.0000	.0001
6	.0018	.0000	.0008	.0008	.0000	-.0000
7	6.5260	141.2301	.2442	2.6758	-.1223	.0005
8	36.1258	-.8.1668	.1.6100	15.3584	.0402	.0022
9	-.2693	-.1653	-.141.0915	.1.205	.0072	-.0075
10	.1754	2.0148	.0038	.0735	-.0020	.0000
11	1.947	-.1181	.0229	.8528	.0002	.0000
12	-.0212	-.0023	2.0058	.0091	-.0000	-.0001
13	-.4.4031	.0081	-.3312	-1.8823		
	31	32	33	34	35	36
1	3.2539	.0172	-.9593	13.9565	-.25.5121	-.29.0366
2	-3.6795	-.3.3323	-.17.2480	795.6710	-.1431.5146	-.1575.9892
3	.0389	-.4.1804	-.2235	-.10.1524	-.1.8.3189	20.1356
4	.0011	.0018	-.0526	-.4339	.7882	.8676
5	-.0022	-.0003	-.9526	.0518	.0323	.0304
6	.0000	-.0052	.0111	-.0133	.0226	.0249
7	3.8098	-.1005	-.9582	14.3400	-.25.1997	-.29.0021
8	-3.7405	-.3.2298	-.17.2436	795.5753	-.1431.4907	-.1575.9349
9	.0448	-.4.4731	-.2086	10.1653	18.3243	20.1380
10	.0012	.0019	-.0526	-.4338	.7883	.8678
11	-.0020	-.0003	-.9525	.0519	.0324	.0302
12	.0001	-.0052	.0111	-.0133	.0227	.0249
13	-.0652	-.0688	2.0991	-113.0076	-63.5751	-.0452

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Table III - 2b. (Continued)

	37	38
1	-1.6124	-.1716
2	-85.8350	-3.4662
3	1.1107	.0535
4	.0470	.0018
5	-.0042	-.0002
6	.0014	.0001
7	-1.6251	.2417
8	-85.8517	1.3292
9	1.0915	-.0096
10	.0471	.0062
11	-.0041	.0735
12	.0014	-.0008
13	.0127	-.1624

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Table III - 3a. Trajectory No. 3 (Positive Perturbations)

	1	2	3	4	5	6
1	5904.0421	644.0867	.2499	976.8664	110.1669	.2090
2	-393.6416	3919.6501	-8.3243	-209.6170	1828.6721	-4.0701
3	-1.1105	-2.0392	6555.6858	.1817	-.0711	1107.5087
4	-.7221	-.7477	-.0012	-.0833	-.1	.0015
5	-.3324	-.1708	-.0124	-.5246	-.0360	-.0164
6	-.0009	.0014	10.2454	.0002	.0001	1.7068
7	-111.8524	-182.0426	.9576	-962.6646	-158.7305	.3493
8	-61.1723	3913.5030	-.1.8576	59.4589	-.98.7460	-1.8179
9	-.7696	-.5578	692.4323	.2788	-.2.1615	-838.4536
10	-1.8532	-.1792	-.0016	-15.1249	-.3.1290	.0027
11	-3.2819	.3958	-.0129	1.5436	-.14.8000	-.0001
12	-.0010	.0020	10.6117	.0012	-.0163	-13.2007
13	8.4052	-.7208	.0606	-1.8428	37.2056	-.1258
	7	8	9	10	11	12
	1	2	3	4	5	6
	14	15	16	17	18	
1	-.0020	.0702	10.4904	-.0020	.0711	3.9810
2	-.0063	-.0492	-2.5979	-.0068	-.0510	-.2407
3	-.0139	-.3809	1.2513	-.0139	-.6953	-.0222
4	-.0000	.0000	-.0186	-.0000	.0000	-.0005
5	-.0091	-.0001	-.0066	-.0001	-.0000	-.0024
6	-.0000	-.0067	-.0000	-.0000	.0075	-.0000
7	-.0037	.1128	-322.9983	-.0038	.1116	-345.2405
8	-.0035	.3644	14.9880	-.0033	.3621	17.2856
9	.5300	329.8387	.2003	.6149	344.2756	.0839
10	-.0002	.0015	-5.3013	-.0002	.0016	-.5.6010
11	-.0020	.0062	.2855	-.0000	.0063	.2754
12	.0119	5.2507	-.0026	.0128	.5.5700	.0012
13	-.0005	-.0422	-.0422	-.0005	-.0051	

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Table III - 3a. (Continued)

	19	20	21	22	23	24
1	-.1134	.6075	-.0010	.1379	.0587	.0031
2	.0368	-.1508	-.0034	.0128	-.0218	.0099
3	-.0005	.0026	-.0070	-.6915	-.0057	-.0140
4	-.0000	-.0002	-.0000	.0002	.0002	.0003
5	-.0001	-.0002	-.0003	-.0000	-.0004	-.0002
6	-.0000	-.0000	-.0000	-.0009	-.0001	-.0000
7	.0504	-.49.9007	-.0041	.0584	.0556	.0574
8	-.0484	2.5560	-.0133	.0769	-.0317	-.0246
9	.0074	.0178	-.0070	49.7742	.0073	.0911
10	-.0001	-.7966	-.0000	.0004	.0002	.0003
11	-.0016	.0422	-.0001	.0017	-.0003	-.0002
12	.0000	.0001	-.0000	.7922	-.0000	.0018
13	.0039	-.0051	-.0005	.0007	.0007	.0005
	25	26	27	28	29	30
1	1.5793	1.2099	-.0192	.5837		
2	112.2235	-.3153	-.0375	40.9159		
3	-.2851	-.0052	1.6842	-.1188		
4	-.2621	-.0005	-.0000	-.0233		
5	-.0042	-.0008	-.0000	-.0016		
6	-.0034	.0000	-.0000	-.0001		
7	-.5.7627	-.135.7317	-.0023	-.0001		
8	-.24.6460	6.6443	-.0183	-.2.1137		
9	.0294	-.0345	-.3645	-.9.3991		
10	-.1.735	-.2.0886	-.135.3876	-.0178		
11	-.2.0768	.1098	-.0007	-.0654		
12	.0041	.0004	-.0045	-.7927		
13	5.2004	-.0117	-.0067	-.0015		
			-.0222	-.0000		
			1.9829	1.9829		
	31	32	33	34	35	36
1	-.76.8053	-.0392	.5949	-.10.1621	17.9481	20.4724
2	-.1.3355	-.5.8474	9.9881	-.684.2629	1353.6087	1476.9655
3	-.0392	86.4927	-.0393	1.6637	-.3.3220	-3.6356
4	-.0167	.0033	.0416	.3880	-.7629	-.8326
5	.0433	.0003	.8406	.0151	.0398	.0451
6	-.0001	.1334	-.0018	.0026	-.0052	-.0056
7	-.77.3525	-.0967	.5279	-.9.7595	17.9686	20.5497
8	-.1.2894	-.5.8174	9.9833	-.684.2297	1353.6755	1477.0040
9	-.0522	86.7929	-.0185	1.6857	-.3.3223	-.6.6217
10	.0166	.0033	.0416	.3880	-.7629	-.8325
11	.0435	.0035	.8406	.0153	.0402	.0455
12	-.0001	.1333	-.0019	.0026	-.0052	-.0057
13	-.2458	-.1438	-.2.0991	115.2961	65.3352	-.1336

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Table III - 3a. (Continued)

	37	38
1	1.0836	.1286
2	79.4003	2.9621
3	-.2058	-.0090
4	-.0450	-.0018
5	-.0010	-.0001
6	-.0003	.0000
7	1.1626	-.1565
8	79.3103	-.7195
9	-.1880	.0035
10	-.0449	-.0050
11	-.0009	-.0605
12	-.0003	.0001
13	-.0012	.1514

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Table III - 3b. Trajectory No. 3 (Negative Perturbations)

1	-5905.9695	-654.0658	1.3226	-978.9502	-112.4343	5926
2	892.8662	-8918.3896	9.6291	212.8184	-1838.3070	3.4194
3	-4.380	-2.0752	-6643.0405	-1284	1.6783	-1112.6114
4	-7241	5.1447	-.0102	.0834	1.0581	-.0022
5	3.3323	.2109	.0062	.5508	.0035	.0019
6	.0015	.0015	-10.2538	.0002	.0027	-1.7153
7	109.9059	172.1100	.5468	960.4474	156.6667	.1502
8	60.3181	-3012.2829	3.2367	-56.1727	89.0213	1.2379
9	.616	4.4839	-679.7814	.0114	3.8179	833.3935
10	1.8567	5.1742	-.0106	15.1249	3.1365	-.0035
11	3.2841	-.3555	.0071	-1.5179	14.8181	-.0145
12	.0015	.0008	-10.8205	-.0007	.0190	13.1922
13	-8.4259	.5357	-.1075	1.9636	-37.3461	.0558
1						
2						
3						
4						
5						
6						
7	-6016.6067	-826.0722	.5804	-1939.4015	-268.8766	*1628
8	832.5376	-5905.7653	6.5308	269.0627	-1927.3783	2.1338
9	-3743	6.5526	-5962.9510	.1251	2.1394	-1945.9861
10	-1.1378	-.0292	.0004	-15.0416	-2.0782	.0013
11	.0490	.5689	-.0007	2.0685	-14.7644	.0163
12	-.0001	.0006	.5693	.0009	-.0163	-14.9074
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Table III - 3b. (Continued)

19	20	21	22	23	24
1	-.2162	-.3109	.0587	-.0641	.1194 .6285
2	-.0650	-.0519	-.0218	.0051	-.0368 -.0848
3	-.0072	-.0152	-.0067	.6360	-.0005 -.1375
4	.0003	.0001	.0001	.0003	.0004 .0041
5	-.0001	.0004	-.0003	-.0001	-.0004 -.0021
6	-.0000	.0001	.0000	.0011	-.0001 -.0002
7	.0103	49.9563	.0597	-.0028	.0597 .6305
8	.0334	-2.5877	-.0184	-.1086	-.0184 -.0886
9	-.0002	.0105	.0003	.49.7669	-.0003 -.8362
10	.0004	.7966	.0002	.0000	.0004 .0045
11	.0020	-.0416	-.0003	-.0019	-.0004 -.0023
12	.0000	-.0002	.0000	.7922	-.0000 -.0180
13	-.0051	.0027	.0005	.0007	.0007 -.0049
25	26	27	28	29	30
1	-1.3197	-1.4364	-.0034	-.5970	
2	-112.4426	.2199	-.0361	-40.9594	
3	2660	-.0123	-1.6979	.0981	
4	.0641	.0009	.0000	.0233	.0000 -.0000
5	.0033	.0009	-.0000	.0013	-.0000 -.0000
6	.0005	.0000	-.0020	.0002	-.0000 -.0000
7	5.8593	135.8254	.0482	2.1642	-.0649
8	24.5144	-7.0666	*2493	9.3507	.0017
9	-.0204	-.0336	135.3953	-.0104	.0002
10	.1746	2.0890	.0007	.0654	-.0018 .0000
11	2.0809	-.1096	.0045	.7932	.0001 -.0000
12	-.0041	-.0005	2.0769	.0016	-.0000 -.0000
13	-5.2051	.0068	-.0020	-1.9841	-.0002
31	32	33	34	35	36
1	76.2116	-.0787	-.5424	9.2859	-.19.0265 -.22.1517
2	-10.7690	-.0002	-10.0300	684.3904	-1378.1019 -1506.1756
3	-.0161	-.86.4966	.0257	1.6949	3.3839 3.6729
4	-.0096	.0035	-.0416	-.3869	.7793 .8515
5	-.0432	.0001	-.8405	.0011	.0045 -.0026
6	.0001	-.1333	.0019	-.0025	.0052 .0057
7	76.7367	-.1356	-.4734	9.6771	-.18.9565 -.21.8509
8	-10.7627	-.1765	-10.0184	684.3868	-1378.0870 -1506.2609
9	-.0177	-.86.7624	.0189	1.6798	3.3840 3.6882
10	-.0095	.0035	-.0416	-.3869	.7794 .8515
11	-.0431	.0005	-.8405	.0011	.0044 -.0028
12	.0001	-.1333	.0019	-.0025	.0052 .0056
13	-.0430	-.1450	2.0991	-115.3381	-66.5947 .0247

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Table III - 3b. (Continued)

	37	38
1	-1.0093	.0537
2	-79.4274	-3.0074
3	*1836	-.0042
4	.0450	.0018
5	.0013	-.0001
6	.0003	-.0000
7	-1.1371	.1616
8	-79.3223	.7362
9	*1941	-.0036
10	.0450	.0051
11	.0015	.0606
12	.0003	-.0001
13	-.0002	-.1519

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Table III - 4a. Trajectory No. 4 (Positive Perturbations)

	1	2	3	4	5	6
1	5914.3442	643.0697	3.1353	1031.9166	116.7557	.5866
2	-861.4255	8899.0970	52.8236	-215.6121	1928.9910	21.7872
3	4.5676	-2.3747	6628.5305	* 0068	6.4152	1162.9468
4	-.7177	-5.1615	-.0319	-.0885	-1.1107	-.0122
5	-3.3027	-.3585	.0882	-.5836	-.0135	.0066
6	* 0094	-.0602	1C.4488	* 0000	* 0106	1.8344
7	-103.0351	-174.2055	-.2806	-907.7788	-149.5322	-.2448
8	-33.5765	2991.6721	14.4657	50.3591	1.0640	9.2227
9	2.2631	36.0102	665.3880	-.7149	1.8.9226	-782.9751
10	-1.8543	-5.1936	-.0323	-15.1336	-3.1648	-.0196
11	-3.2557	.2089	.0923	1.4604	-14.7801	-.0894
12	.0096	-.0038	11.C157	-.0057	* 1065	-13.0726
13	8.8959	-.2889	-.6598	-1.8454	39.6387	.6416
	7	8	9	10	11	12
1	1	2	3	4	5	6
2						
3						
4						
5						
6						
7	6018.1595	816.6598	2.9556	1939.8923	265.7562	.9718
8	-822.8019	5906.9277	38.3751	-265.9208	1927.7678	12.5251
9	2.3230	-38.4334	5962.8015	* 7628	-12.5415	1945.9412
10	1.1416	.0313	.0033	15.0452	2.0541	.0074
11	-.0481	-.5693	-.0C38	-2.0443	14.7673	.0960
12	-.0002	.0036	-.5696	* 0058	-.0960	14.9071
13						
	13	14	15	16	17	18
1	.0002	.0594	* 0002	* 0263	3.3925	
2	.0123	.0471	* C123	* 0447	-.1885	
3	-.0060	-3.5926	-.0060	-3.9348	* 0057	
4		-.0002	-.0000	-.0002	-.0003	
5		-.0030	-.0000	* 0001	-.0020	
6						
7	.0165	-.6671	-.314.6217	-.0065	-.0000	
8	-.0019	-4.2912	15.7583	* 0134	-.6614	-324.6181
9	-.5345	309.9547	-.8553	-.023	-4.5079	15.2700
10	.0012	-.0108	-5.2456	* 5693	323.7000	-.4398
11	-.0001	-.0723	.2617	* 0013	-.0115	-5.5874
12	.0124	5.2206	-.00C2	* 0134	5.5583	-.0076
13	-.0005	-.0010	-.0422	* 00C5	-.0007	.0042

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Table III - 4a. (Continued)

	19	20	21	22	23	24	
1	.0021	.8200	.1942	.1757	.1883	.2543	
2	-.0873	-.2476	-.2811	-.1481	.0055	-.1538	
3	-.0009	.0177	.0075	-.5387	-.0016	.0038	
4	-.0001	-.0002	.0000	-.0000	-.0000	.0000	
5	-.6004	-.0001	-.0003	-.0002	-.0003	.0004	
6	-.0000	.0002	.0001	-.0008	-.0000	.0000	
7	-.0040	-.46.9190	-.0549	-.1460	-.0006	-.0034	
8	-.1449	2.1217	-.2922	-.7465	-.0060	-.1442	
9	-.0076	.0685	-.0116	46.7611	-.0057	.0785	
10	-.0012	-.7919	.0000	-.0015	.0002	.0000	
11	-.0013	.0325	-.CCC1	-.0100	-.0001	.0007	
12	-.0000	-.0009	.0000	-.7877	.0001	.0019	
13	.0046	-.0054	-.0000	-.6010	-.0020		
	25	26	27	28	29	30	
1	1.7961	1.1373	.0644	.3167	.0001	-.0000	
2	125.7684	-.3192	-.0445	43.1383	.0035	-.0018	
3	1.9458	-.0036	1.4407	-.6217	-.0017	.0009	
4	-.0708	-.0004	-.0000	-.0244	.0000	.0000	
5	1.3771	-.0005	-.0005	-.0026	.0000	.0000	
6	.0031	-.0000	.0020	-.0010	.0000	.0000	
7	-5.4458	-136.5583	-.2177	-1.8514	.0630	.0008	
8	-11.5970	6.5464	1.6839	-.6864	.0007	.0019	
9	.0732	-.1873	-136.1452	.0177	-.0029	-.0096	
10	-.1806	-2.2115	.0044	-.0636	.0019	.0000	
11	-2.1897	.1099	.0279	-.7837	-.0000	.0003	
12	-.0250	-.0029	-2.1958	-.0090	.0001	-.0002	
13	5.8398	-.0151	-.0015	2.0898	-.0002	-.0007	
	31	32	33	34	35	36	
1	-63.3722	.0824	.3984	-.9.0609	17.0314	1.9338	
2	-2.2804	-.6.5915	4.1637	-.677.0534	1423.6103	155.2857	
3	-.1867	71.0353	.0726	-.7849	20.6540	2.2487	
4	.0142	.0036	.0365	.3805	-.8154	-.0887	
5	.0351	.0002	.7884	-.0712	-.1687	-.0127	
6	-.0003	.1122	.01C3	-.0162	.0302	.0034	
7	-63.6856	-.2539	.1496	-.8.7476	15.7198	1.9277	
8	-2.2398	-.6.5727	4.1658	-.677.0178	1370.0005	155.2838	
9	-.2023	71.2837	.C472	-.9.7889	46.6108	2.2464	
10	.0142	.0036	.C364	.3805	-.8154	-.0887	
11	.0357	.0004	.7895	-.C706	-.1684	-.0127	
12	-.0003	.1121	.01C3	-.0162	.0302	.0034	
13	-.2231	-.1375	-.0000	115.7024	69.7966	.0320	

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Table III - 4a. (Continued)

	37	38
1	1.2407	.1786
2	78.9692	2.9485
3	1.1381	.0402
4	-.0448	-.0018
5	.0031	.0001
6	.0019	.0001
7	1.0382	-.1187
8	78.8736	-.2947
9	1.1290	.0009
10	-.0447	-.0046
11	.0031	-.0559
12	.0018	-.0006
13	-.0116	.1489

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Table III - 4b. Trajectory No. 4 (Negative Perturbations)

	1	2	3	4	5	6
1	-5911.9568	-651.5352	-1.1910	-1030.9960	-116.0556	-.0499
2	862.8462	-8397.5292	-50.9061	222.1524	-1937.3091	-21.7897
3	-5.2502	-2.2031	-6616.2787	.2837	-4.4717	-1168.1687
4	.7200	5.1416	.0235	.0854	1.1151	.0125
5	3.3596	.1463	.0070	.5872	.0164	.0025
6	-.0066	.0016	-10.4493	.0004	-.0069	-1.8434
7	105.3207	164.8925	1.9085	909.0870	149.3684	.7600
8	40.3244	-2990.4365	-12.5100	-43.6243	-10.2155	-.2317
9	-2.8827	-40.6547	-653.1392	1.0677	-17.0257	777.7501
10	1.8538	5.1706	.0230	15.1303	3.1692	.0199
11	3.3124	-.4195	.0037	-1.4571	14.7837	.0984
12	-.0064	.0046	-11.0159	.0055	-.1031	13.0637
13	-9.0219	.7657	.3336	2.0861	-39.6532	-.7634
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			9	10	11	12
			13	14	15	16
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			5	6	7	8
			9	10	11	12
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			1	2	3	4
			5	6	7	8
			9	10	11	12</

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Table III - 4b. (Continued)

	20	21	22	23	24
1	-.0581	-.3136	.1324	.1442	2.5367
2	-.2234	-.0514	-.2991	-.1483	-1.4597
3	.0170	.0117	.0015	.5485	.0564
4	.0011	-.0000	.0001	.0000	.0008
5	-.0062	.0006	-.0004	-.0003	.0044
6	.0009	.0002	.0001	.0010	.0007
7	.0035	46.8632	.0066	.0909	.JC18
8	-.1344	-2.4184	-.2682	-.4429	-1.3782
9	-.0041	.0078	.0013	-.46.7671	-.8024
10	.0002	.7917	.0002	.0016	.0007
11	.0020	-.0386	.0004	.0099	.2666
12	.0009	.0011	-.0000	-.7876	-.0165
13	-.0054	.0027	-.0010	.0005	-.0122
	25	26	27	28	29
1	-1.5352	-1.1970	-.0003	-.3177	-.0007
2	-126.2524	.2130	-.0589	-43.1636	-.0052
3	-1.8290	-.0029	-1.4278	-.6268	.0061
4	.0717	.0008	-.0002	.C244	.0000
5	-.0018	.0006	.0000	-.0006	.0000
6	-.0028	.0000	-.0016	-.0009	.0000
7	5.3930	136.4990	-.2777	1.8519	-.0631
8	11.1781	-6.6727	-1.8068	4.6733	-.2068
9	-.0752	.1819	136.1467	-.0200	.0059
10	.1817	2.2119	-.0045	.6638	-.0018
11	2.1369	-.1093	-.0275	.7869	.0001
12	.5252	.0029	2.1959	.0090	.0001
13	-5.8630	.0085	-.0044	-2.0981	-.0002
	31	32	33	34	35
1	63.0247	.3205	-.2106	.8.3860	-.17.8610
2	-9.2115	-4.8167	-4.1828	676.4000	-1451.2789
3	.0546	-71.1607	-.0623	9.7835	-2C.9933
4	-.0076	.0025	-.C365	-.3839	.8193
5	-.3360	.0002	-.7884	-.0643	-.0657
6	.0001	-.1121	-.C1C3	.0154	-.0338
7	63.2766	-.0324	-.2115	8.5117	-.17.9232
8	-9.2070	-.8057	-.1891	676.3874	-1451.2778
9	.0422	-71.4361	-.C5C6	9.7845	-.21.0059
10	-.0075	.0024	-.C364	-.3839	.8193
11	-.0353	.0003	-.7884	-.0338	-.0653
12	.0001	-.1122	-.0103	.0153	-.0338
13	-.0454	-.1304	2.0991	-115.5041	-70.3957

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Table III - 4b. (Continued)

	37	38
1	- .5195	.0096
2	-78.7134	-2.9448
3	-1.1139	- .0410
4	.6445	.0015
5	- .0012	- .0090
6	- .0018	- .0000
7	-1.6771	.1186
8	-78.8635	.2886
9	-1.1336	.0021
10	.6446	.0044
11	- .0009	.0566
12	- .0013	.0007
13	.0064	- .1509

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Table III - 5a. Trajectory No. 5 (Positive Perturbations)

	1	2	3	4	5	6
1	5890.9393	784.2101	-10.8164	-858.1168	131.3702	-4.3239
2	-948.0713	8893.6038	-189.5614	-164.3731	1618.7186	-67.7877
3	-14.2282	-3416	6714.8615	-1.3300	-17.1798	989.1001
4	-753.5	-5.1354	•1022	-0.933	-9262.	.0381
5	-3.4797	-2.831	-0.0128	-4979	.0134	-0.037
6	-0.0139	0.042	9.9814	-0.0013	-0.0271	1.4702
7	-122.7618	-59.8330	1.8607	-1080.7052	-143.2480	-0.0918
8	-97.4762	2991.5745	-51.2709	1110.4963	-307.3227	-22.5285
9	-7.1815	-139.0502	753.1506	.9461	-62.4363	-956.3614
10	-1.8857	-5.1667	-1015	-15.1280	-3.0495	.0700
11	-3.4306	.2808	-0.0261	1.6156	-14.7411	.3418
12	-0.0138	.0171	10.5461.	.0162	-3.3739	-13.4334
13	8.1394	.2508	1.1320	-.1318	33.8784	-2.2442
	7	8	9	10	11	12
	1	2	3	4	5	6
	13	14	15	16	17	18
1	-0.0203	•0262	-0.0203	-0.0055	•8101	
2	-0.0237	-0.0420	-0.0237	-0.0334	-0.1175	
3	-0.0016	-3229	-0.0016	-6593	.0048	
4	-0.0001	-0.001	-0.0001	-0.001	.0002	
5	-0.000	-0.000	.0077	.0000	.0001	-0.0005
6	•0000	-0.0005	.0001	.0000	-0.0014	-0.0000
7	-1567	2.6978	-371.7626	-.1902	2.8222	-387.3919
8	.0480	16.8913	40.8854	.0730	17.5324	40.6655
9	*6691	373.3617	•5162	*7252	387.9879	*9187
10	-0.0032	•0377	-5.2258	-0.0034	.0396	-5.4997
11	•0009	•2369	•5839	.0010	.2490	.5735
12	•0113	5.2171	•0134	.0126	5.4880	.0133
13	.0002	-.0002	-.0422	-.0000		.0010

Table III - 5a. (Continued)

19	20	21	22	23	24
1	.1140	.1641	.0629	.0294	.1133
2	.0257	-.1415	-.0557	-.0147	-.0186
3	.0044	.0128	.0275	-.0418	.0585
4	.0000	.0001	.0002	.0001	.0003
5	-.0002	-.0000	-.0002	-.0003	-.0003
6	-.0001	-.0001	-.0001	-.0001	-.0001
7	-.0279	-.56.2245	.0203	.4482	.0497
8	-.0640	.6.0062	.0237	2.5884	-.0071
9	-.0159	.1337	.0016	56.3213	.0851
10	-.0001	-.7884	.0002	.0059	.0003
11	-.0019	.0846	.0005	.0358	-.0004
12	-.0001	.0019	-.0001	.7872	-.0001
13	.0044	-.0034	-.0012	.0012	.0018
					.0010
25	26	27	28	29	30
1	5.8765	-.0337	-.0372	2.3799	.0049
2	90.9649	-.1794	-.0858	36.5749	-.0051
3	-.4.8668	.0334	-.0887	-1.9435	.0139
4	-.0510	-.0003	-.0000	-.0206	-.0001
5	.0048	.0000	-.0000	.0021	-.0000
6	-.0075	-.0000	-.0005	-.0031	-.0000
7	-9.1187	-137.9048	-.9885	-3.7308	.0937
8	-46.1826	14.7391	-6.3820	-19.4259	.0020
9	1.5094	.3233	-138.1651	.6395	.0028
10	-.2529	-.1.8761	-.0136	-.1055	.0018
11	-1.8550	.2020	-.0856	-.7798	-.0001
12	.0791	.0043	-1.8724	.0334	-.0000
13	4.2432	-.0105	-.0042	1.7834	.0005
					.0002
31	32	33	34	35	36
1	-6.1453	-.1352	2.3951	-42.9295	75.7798
2	-2.4944	-2.9107	22.9517	-675.3084	1208.4783
3	-1909	7.0242	-1.1318	35.9170	-64.2927
4	-.0027	.0017	.0963	.3775	-.6884
5	.0032	-.0001	.9207	-.0682	.0076
6	-.0003	.0105	-.0437	.0567	-.0962
7	-6.5122	-.1811	2.4406	-.43.0785	75.7580
8	-2.3857	-2.8482	22.9940	-675.3424	1208.4214
9	.1848	7.2914	-1.1147	35.8692	-64.3937
10	-.0026	.0018	.0963	.3775	-.6885
11	.0030	-.0002	.9206	-.0686	.0075
12	-.0003	.0104	-.0437	.0566	-.0962
13	-.0830	-.0747	-2.0989	115.6477	59.0910

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Table III - 5a. (Continued)

	37	38
1	5.1511	.1502
2	78.5071	2.9267
3	-4.1749	-.0962
4	-.0445	-.0018
5	.0023	.0001
6	-.0063	-.0003
7	5.0890	-.3011
8	78.5923	-1.6415
9	-4.1502	
10	-.0446	-.0089
11	.0023	-.0659
12	-.0063	.0028
13	-.0004	.1506

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Table III - 5b. Trajectory No. 5 (Negative Perturbations)

1	2	3	4	5	6
1	-5897.6926	-792.1219	10.1062	-858.0006	-136.8436
2	944.8193	-8901.8263	190.4035	155.0438	-1619.9626
3	16.4269	3159	-6722.4558	.7593	16.9772
4	.7270	5.1376	-1132	.0962	.9319
5	3.2847	.1334	-.0047	.4759	.0172
6	.0255	.0010	-.9.9894	.0015	.0256
7	115.4153	52.2372	-2.7767	1080.1969	137.9084
8	94.1176	-3000.1442	51.8770	-119.8236	305.9983
9	9.3758	138.9633	-760.8935	-1.4.393	6.2.2089
10	1.8591	5.1682	-.1138	15.1308	3.0.5553
11	3.2357	-.4331	.0083	-1.6.381	14.7716
12	.0260	-.0123	-10.5554	-.0159	.3.723
13	-7.7502	.0998	-1.1505	.0138	-33.8880
					2.1875
1	2	3	4	5	6
7	8	9	10	11	12
13	14	15	16	17	18
1	-6014.0460	-844.1286	12.7511	-1938.5685	-274.7338
2	850.7139	-5901.5535	138.2982	274.9648	-1926.0353
3	6.9980	-138.6880	5961.3276	2.2850	45.1404
4	-1.1375	-.0303	.0006	-15.0348	-1945.4572
5	.0498	.5686	-.0131	2.1137	.0319
6	-.0003	.0134	.5687	.0175	.3458
7					14.9036
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Table III - 5b. (Continued)

19	20	21	22	23	24
1 -.0056	.0301	.0252	.0147	.0580	1.2379
2 -.0391	.0134	.0186	-.0154	-.0506	.1539
3 .0402	.0294	.0155	.0418	.0136	3226
4 .0001	.0001	.0002	.0001	.0003	.0036
5 -.0002	-.0002	-.0002	-.0003	-.0001	-.0023
6 .0001	.0001	-.0000	.0002	-.0001	.0003
7 .0357	56.2294	.0203	-.3797	.0685	.1878
8 .0525	-6.0114	.0237	-2.6050	-.0166	-.0952
9 -.0107	-.1198	-.0016	-.56.3340	-.0127	-.9781
10 .0003	.7886	.0001	-.0055	.0008	.0028
11 .0016	-.0853	-.0005	-.0363	-.0001	-.0045
12 -.0000	-.0017	-.0000	-.7871	-.0001	-.0171
13 -.0039	.0044	.0012	-.0010	.0073	.0073
25	26	27	28	29	30
1 -5.7249	-.0908	-.0293	-.2.3141		
2 -91.0135	.1197	-.0245	-.36.5089		
3 4.8832	-.0116	-.1241	1.9622		
4 .0525	.0004	-.0001	.0211		
5 -.0002	-.0001	.0000	.0000		
6 .0072	-.0000	.0006	.0028		
7 9.2229	137.9097	.9880	3.7462	-.0937	-.0098
8 46.2135	-14.7442	6.3480	19.4547	-.0020	.0103
9 -.1.5329	7.3094	1138.1913	-.6519	-.0028	-.0278
10 .2545	1.8751	.0136	.1058	-.0018	-.0000
11 1.8617	-.2018	.0859	.7822	-.0002	-.0000
12 -.0794	-.0042	1.8725	-.0335	-.0000	-.0005
13 -4.2578	.0071	.0005	-.1.7888		
31	32	33	34	35	36
1 5.6774	-.3000	-.2.3442	42.8953	-.7.6161	-.85.7988
2 -3.8030	-3.4559	-23.0746	673.4729	-1231.3800	-1345.3538
3 -1597	-6.6755	1.0861	35.7575	65.5269	71.4736
4 .0009	.0019	-.0962	.3852	.6987	.7620
5 -.0032	.0032	-.9204	-.0120	-.0371	-.0531
6 .0002	-.002	-.0436	-.0526	-.0994	-.1090
7 5.9359	-.3016	-.2.3973	42.7106	-.77.8392	-.85.9805
8 -3.8983	-3.4339	-.23.0292	673.3864	-1231.4364	-.1345.4476
9 -1213	-6.9825	1.0865	35.7945	65.5320	71.4503
10 .0010	.0019	-.0963	-.3853	.6986	.7620
11 -.0036	.0001	-.9205	-.0120	-.0373	-.0533
12 .0002	-.0098	-.0437	-.0527	-.0994	-.1090
13 -.0686	-.0774	2.0991	-.115.4634	-60.0620	.0725

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Table III - 5b. (Continued)

	37	38
1	-4.3691	-.3843
2	-78.4605	-2.8571
3	4.1834	.2042
4	.0450	.0019
5	.0000	.0000
6	.0061	.0001
7	-5.0443	.3214
8	-78.5419	1.6652
9	4.1342	-.0604
10	.0449	.0089
11	-.0002	.0659
12	.0062	-.0028
13	.0004	-.1506

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